EcoStruxure Panel Server Advanced

Firmware Release Notes

Wireless Devices Concentrator and Modbus Gateway, Datalogger, and Energy Server

EcoStruxure offers IoT-enabled architecture and platform.

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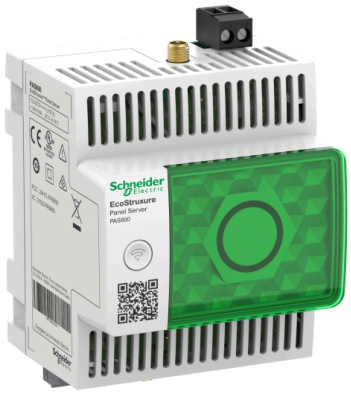

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About the Document

Document Scope

This document provides users with the following information about the EcoStruxure™ Panel Server Advanced gateway:

- New features, major fixes, and limitations for the latest firmware version
- List of supported devices
- History of previous firmware versions

Validity Note

This document applies to the Panel Server Advanced gateway with firmware version 002.005.000.

Online Information

The characteristics of the products described in this document are intended to match the characteristics that are available on www.se.com. As part of our corporate strategy for constant improvement, we may revise the content over time to enhance clarity and accuracy. If you see a difference between the characteristics in this document and the characteristics on www.se.com, consider www.se.com to contain the latest information.

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Available Languages of the Document

The document is available in these languages:

- English (DOCA0248EN), original language
- French (DOCA0248FR)
- German (DOCA0248DE)
- Italian (DOCA0248IT)
- Portuguese (DOCA0248PT)
- Spanish (DOCA0248ES)

Related Documents

Title of documentation	Publication date	Reference number
EcoStruxure Panel Server - User Guide	10/2025	DOCA0172EN DOCA0172DE DOCA0172ES DOCA0172FR DOCA0172IT DOCA0172PT
EcoStruxure Panel Server - Modbus File	10/2025	DOCA0241EN
EcoStruxure Panel Server - Alarm File	10/2025	DOCA0330EN

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Introduction

EcoStruxure Master Range

EcoStruxure is Schneider Electric's IoT-enabled, plug-and-play, open, interoperable architecture and platform, in Homes, Buildings, Data Centers, Infrastructure and Industries. Innovation at Every Level from Connected Products to Edge Control, and Apps, Analytics and Services.

Panel Server Advanced Gateway

Panel Server Advanced is a high performance, all-in-one gateway used to retrieve data from IEEE 802.15.4 and Modbus devices.

Panel Server Advanced is a data concentrator for wireless devices (see detailed list, page 22).

Panel Server Advanced is available with different power supplies:

- PAS800: 110–277 Vac/Vdc
- PAS800L : 24 Vdc
- PAS800P : Power over Ethernet (PoE)

Panel Server Advanced offers the following features:

- Two 10/100BASE-T Ethernet RJ45 ports
- Upstream Modbus TCP/IP connectivity (edge connection)
- Upstream Wi-Fi connectivity
- Wi-Fi access point
- Downstream Modbus TCP/IP connectivity
- Downstream IEEE 802.15.4 connectivity
- Downstream Modbus-SL connectivity
- Two digital inputs (PAS800L)
- Wi-Fi external antenna
- IEEE 802.15.4 external antenna
- Data sampling
- Data logging (3 years)
- Compatible with the following commissioning tools of Panel Server and connected devices:
  - EcoStruxure Power Commission software
  - EcoStruxure Panel Server webpages
- Compatible with the following Schneider Electric cloud applications:
  - EcoStruxure Energy Hub
  - EcoStruxure Asset Advisor
  - EcoStruxure Resource Advisor

Convention

EcoStruxure Panel Server is hereafter referred to as Panel Server.

Firmware Release History

Date	Panel Server Advanced firmware version	Availability
February 2026	002.005.000	Latest commercial release
October 2025	002.004.000	Obsolete
July 2025	002.003.000	Obsolete
June 2025	002.002.001	Release for manufacturing
April 2025	002.002.000	Obsolete
January 2025	002.001.000	Obsolete
September 2024	002.000.000	Obsolete
May 2024	001.010.000	Obsolete
February 2024	001.009.000	Obsolete
November 2023	001.008.000	Obsolete
August 2023	001.007.000	Obsolete
May 2023	001.006.000	Obsolete
February 2023	001.005.001	Obsolete
November 2022	001.005.000	Obsolete
August 2022	001.004.000	Obsolete
June 2022	001.003.002	Obsolete
May 2022	001.003.001	Obsolete

Firmware Update Policy

Firmware update is recommended to benefit from the latest features and potential bug fixes, and to ensure that remote support from Schneider Electric Customer Care Center is available. When the remote certificate for your firmware version is no longer valid, remote support is no longer available.

Firmware Update with EcoStruxure Power Commission Software

Use the latest version of EcoStruxure Power Commission software to update Panel Server to the latest firmware version available.

The latest version of EcoStruxure Power Commission software is available here.

For more information about the use of EcoStruxure Power Commission software, refer to *EcoStruxure Power Commission Online Help*.

Firmware Update with EcoStruxure Panel Server Webpages

To update the firmware with the Panel Server webpages, proceed as follows:

1. Make sure that the Panel Server is continuously powered during the firmware update.

2. Retrieve the latest version of Panel Server firmware and save on your PC in one of the following ways:
   - From your Schneider Electric country website

     NOTE: Ensure that you select the firmware update suitable for your Panel Server model and hardware version.
   - Directly from the **Maintenance > Firmware update** page of the webpages in step 5 of this procedure. The correct firmware update suitable for your Panel Server model is automatically selected.
3. Connect your PC to the Panel Server via an Ethernet cable or via Wi-Fi through the Wi-Fi access point.. The connection procedures are described in DOCA0172•• *EcoStruxure Panel Server - User Guide*, page 6.
4. Follow the procedure described in DOCA0172•• *EcoStruxure Panel Server - User Guide*, page 6 to access the Panel Server webpages.
5. From the Panel Server webpages, navigate to **Maintenance > Firmware update**. You can download the correct firmware update from the section **Retrieve the appropriate firmware**. Click **Download file** to download it to your PC.
6. In the **Firmware update** section, import the firmware file by clicking **Import file** and selecting the downloaded firmware file from your file explorer. Follow the on-screen instructions.
7. Reboot the Panel Server to update the firmware.

   NOTE: The Panel Server webpages cannot be accessed while the Panel Server is rebooting.
8. After the reboot, check that the firmware version is the latest to make sure that the update is effective.

   If the firmware version is still the old one, perform the firmware update again.

   If the problem persists, contact your Schneider Electric customer support.

Latest Firmware Version

Firmware Version 002.005.000

New Features for Firmware Version 002.005.000

- **Security improvements** in EcoStruxure Panel Server:
  - Security patch
  - Default password must be entered at first login to Panel Server webpages. The default password is **AAAAAAAA** and is also available in DOCA0172•• *EcoStruxure Panel Server - User Guide*, page 6. After entering the default password, you are required to set a new password and confirm it.
  - Cybersecurity recommended actions throughout product lifecycle added in DOCA0172•• *EcoStruxure Panel Server - User Guide* and in DOCA0211••*EcoStruxure Panel Server - Cybersecurity Guide*, page 6.
  - The login page of the Panel Server webpages no longer indicates the firmware version currently running.
- Consumption overview is enhanced with detailed information about consumption by zone, displayed as a separate chart in **Home** page, in addition to the existing by usage chart. Clicking on one of the legend items of either chart (a usage or a zone) displays a screen with detailed information about consumption in that usage or zone.

  The consumption by usage chart also contains the following information, in addition to the total consumption by main usages:
  - Active energy for **Main/incomer** during the selected period.
  - The difference, if any, between active energy for **Main/incomer** and total active energy consumed by all usages, with an alert symbol, to highlight that consumption is not monitored at 100% through your Panel Server.
- **Trending** page is enhanced with the possibility to view aggregated data by zone in addition to by usage. You can choose to display data in the following ways:
  - **All usages** or **All zones**
  - **Main usages** or **Main zones**
  - A selection of individual usages or zones

  You can also display the **Main/incomer usage**.

  When viewing by usage, you can filter by zone and vice versa. This allows you to monitor consumption more precisely and with more flexibility.
- Dynamic antenna selection is added and available when internal antenna is selected. This is an advanced function and is deactivated by default. It intended for use with specific configurations containing TH110 and CL110 sensors, where fading issues are observed. For more information, refer to DOCA0172•• *EcoStruxure Panel Server - User Guide*, page 6.
- The following alarms are supported for MasterPacT MTZ with MicroLogic Active control unit E:
  - Undervoltage protection 1 phase alarm
  - Undervoltage protection all phases alarm
  - Overvoltage protection 1 phase alarm
  - Overvoltage protection all phases alarm

New Supported Devices

Support for Modbus TCP/IP devices PowerLogic EM3570 series DIN rail mount energy meters with Ethernet:

- METSEEM3570
- METSEEM3570A
- METSEEM3570X
- METSEEM3570AX

User Interface Improvements

Improvement in rendition of the following PowerTag device images:

- LV434020 PowerTag M250 3P 250A, PowerTag Energy M250, M630, and PowerLogic Tag E-Frame
- LV434022 PowerTag M630 3P 630A, PowerTag Energy M250, M630, and PowerLogic Tag E-Frame
- LV434021 PowerTag M250 3P+N 250A, PowerTag Energy M250, M630, and PowerLogic Tag E-Frame
- LV434023 PowerTag M630 3P+N 630A, PowerTag Energy M250, M630, and PowerLogic Tag E-Frame

Limitations for Firmware Version 002.005.000

General Performance and Limitations

- Keep firmware up to date in order to allow the Schneider Electric Customer Care Center to remotely access the Panel Server webpages.

  Remote access certificates for each firmware version are valid up to the dates indicated in the table.

Panel Server firmware version	Remote access certificate validity date
002.005.000	08 October 2026
002.004.000	10 August 2026
002.003.000	07 May 2026

  For more information about Firmware Update, refer to DOCA0172•• *EcoStruxure Panel Server - User Guide*, page 6.

Limitations on Wireless Devices

- Under certain circumstances, after a restore operation on Panel Server, the **Settings** page for a PowerTag Control IO device (A9XMC1D3) may be inaccessible on Panel Server webpages. The page remains in a loading loop and does not display the configuration settings. The PowerTag Control IO device continues to function correctly.

  Contact Schneider Electric Customer Care Center to restore access to the configuration page for this device.

General Features

The following table presents the availability of general features on Panel Server Advanced in firmware version 002.005.000.

● Available

● Not available

General features		Availability
Functionality	Separated network topology	●
	Switched network topology	●
	Connection to Edge Control (EcoStruxure Power Monitoring Expert, EcoStruxure Power Operation,EcoStruxure Building Operation, any Building Management System, or third-party monitoring or supervision system)	●
	Ability to disable concurrently and permanently the wireless networks (Wi-Fi and IEEE 802.15.4) by using Panel Server webpages	●
Wi-Fi	2.4 GHz	●
	5 GHz	●
	External Wi-Fi antenna (reference: PASA-ANT1)	●
	Wi-Fi access point, available to connect a smartphone running the Schneider Electric EcoStruxure Power Commission mobile app	●
Human Machine Interface (HMI)	FDM128 Ethernet display	●
Configuration	User management by single user account	●
	User management by multiple users with Role-Based Access Control (RBAC)	●
Alarms	• In general, publication of alarms supported by the end devices. • Publication of alarms related to the following: ◦ Communication issue between a device and Panel Server when available from the end devices ◦ Alarm associated to ERMS on circuit breaker ◦ The three levels of alarms from HeatTag sensors ◦ Alarms associated to **Breaker I/O** device connected downstream to an I/O Smart Link gateway ◦ Communication loss alarm for wireless device connected downstream to a child gateway.	●
Protocols	Modbus TCP/IP server	●
	Modbus TCP/IP client	●
	DHCP client	●
	DHCP server	●
	DPWS server	●
	HTTPS	●
	SFTP client	●
	RSTP	●
Data export	Panel Server webpages for publication on SFTP server or HTTPS server	●
	Publication on Schneider Electric cloud by using Panel Server webpages	●
	CSV export on PC by using Panel Server webpages	●

Maximum Configuration

The maximum number of devices that can be configured in a system with a Panel Server Advanced depends on the type of connected devices:

Device type		**Maximum number of concurrent devices**
Wireless device (not supported by PAS600LWD and PAS600PWD)	PowerTag Energy sensors	85
	PowerLogic Tag energy sensors	85
	Acti9 Active devices	85
	Wireless indication auxiliaries for ComPacT and PowerPacT circuit breakers	85
	MasterPacT MTZ circuit breakers with MicroLogic Active AP or EP control unit	8
	Wireless CO_2 sensors	100
	Wireless temperature and humidity sensors	100
	PowerTag Ambient sensors	100
	PowerLogic Easergy TH110/CL110 environmental sensors	100
	PowerLogic Thermal Tag TH150/TH200 wireless temperature sensors	100
	PowerLogic HeatTag sensors	15
	PowerTag Control devices	10
	PowerLogic PD100 devices	15
	Exiway Link devices	20
	XB5R transmitters (ZBRT)	100
	The recommendation for a mixed configuration of wireless devices is as follows: • Any combination of wireless devices listed in the rows above should not exceed **40 devices**. • The total number of PowerTag Control, PowerLogic HeatTag, PowerLogic PD100, MasterPacT MTZ, and Exiway Link devices should not exceed **20 devices**.	
Modbus-SL devices	Modbus-SL devices other than I/O devices:	32 **NOTE:** The maximum number depends on the serial line length and the type of device(s).
	I/O devices: • I/O Smart Link device • Acti9 Smartlink Modbus-SL device • SmartLink SIB gateway	• 8 I/O Smart Link or Acti9 Smartlink Modbus-SL devices connected to Panel Server serial line • OR 1 SmartLink SIB + 7 I/O Smart Link or Acti9 Smartlink Modbus-SL devices • OR 8 SmartLink SIB
Modbus TCP/IP devices	Devices physically connected to the Panel Server and virtual devices, that is, IEEE 802.15.4 wireless devices connected to a child Panel Server gateway.	128 **NOTE:** The Panel Server supports 64 simultaneous Modbus TCP/IP client connections (for example, SCADA system).

Commissioning and Monitoring Features

The following table presents the availability of commissioning and monitoring features on Panel Server Advanced in firmware version 002.005.000.

● Available

● Not available

Commissioning and monitoring features		**Availability**
Modbus serial communication	Commissioning of feature to use the Modbus serial port in reverse mode by using Panel Server webpages	●
Digital inputs (PAS800L)	Commissioning by using EcoStruxure Power Commission software	●
	Commissioning by using Panel Server webpages	●
	Monitoring by using EcoStruxure Power Commission software	●
	Monitoring by using Panel Server webpages	●
	Status assignment from a list of predefined values for each generic input/output in the **I/O contextualization** setting by using EcoStruxure Power Commission software or Panel Server webpages	●
Firmware update	Applied to one Panel Server gateway by using EcoStruxure Power Commission software	●
	Applied to one Panel Server gateway by using Panel Server webpages	●
	Applied to several Panel Server gateways by using EcoStruxure Power Commission software	●
	Applied to several Panel Server gateways by using Panel Server webpages	●
Backup restore	Backup restore on a Panel Server of the same model by using EcoStruxure Power Commission software	●
	Backup restore on a Panel Server of the same model by using Panel Server webpages	●
Configuration	Configuration by using EcoStruxure Power Commission software	●
	Ethernet configuration for upstream communication by using Panel Server webpages	●
	Wi-Fi configuration for upstream communication by using Panel Server webpages	●
	Modbus configuration of Modbus TCP/IP and Modbus serial devices by using Panel Server webpages	●
	Modbus discovery of Modbus devices using custom models where custom models include Modbus discovery rules by using Panel Server webpages	●
	Selective discovery of wireless devices by using EcoStruxure Power Commission software	●
	Selective discovery of wireless devices by using Panel Server webpages including heightened security discovery with install code for 16-character RF-ID devices	●
	Automatic discovery of wireless devices by using Panel Server webpages	●
	Disable concurrently and permanently the wireless networks (Wi-Fi and IEEE 802.15.4) in the Panel Server by using Panel Server webpages	●
Monitoring	Display of data of I/O Smart Link devices by using Panel Server webpages	●
	Display of data of Panel Server digital inputs by using Panel Server webpages	●
	Display of data of the supported devices (see commercial references in Supported Devices, page 22) by using Panel Server webpages	●
	Diagnostic by using Panel Server webpages	●
Email notification	Email notification of selected alarms by using Panel Server webpages	●
	Email notification of selected alarms by using EcoStruxure Power Commission software	●
Data logging	Access to 3-year data logger with predefined data sampling that can be configured by using Panel Server webpages	●

Commissioning and monitoring features		Availability
	Access to 3-year data logger with predefined data sampling with EcoStruxure Power Commission software	●

Performance and Limitations

General Performance and Limitations

- For any data conversion to INT64 using logic codes, the largest number that can be accurately represented is 9007199254740991. Any number larger than this will not be precise.
- Web browser Mozilla Firefox not supported.
- No manual addition of wireless devices connected to a child/downstream gateway by using EcoStruxure Power Commission software.
- Automatic discovery of wireless devices under a child gateway is limited to 128 devices because wireless devices are seen as Modbus TCP/IP devices.
- Typical Panel Server latency between Modbus TCP/IP request forwarded to the Modbus serial network is 10 ms.
- Some device identification data of the aggregated devices connected downstream from a Smartlink SI B or Smartlink SI D (such as I/O Smart Link or wireless devices) are displayed in the Panel Server webpage if the data is configured and commissioned from the Smartlink SI B or Smartlink SI D webpage.
- Keep firmware up to date in order to allow the Schneider Electric Customer Care Center to remotely access the Panel Server webpages.

  Remote access certificates for each firmware version are valid up to the dates indicated in the table.

Panel Server firmware version	Remote access certificate validity date
002.005.000	08 October 2026
002.004.000	10 August 2026
002.003.000	07 May 2026

  For more information about Firmware Update, refer to DOCA0172•• *EcoStruxure Panel Server - User Guide*, page 6.

Limitations on Publication

- For legacy Smartlink devices and embedded input devices, configured as Pulse counter, when publication is to Schneider Electric cloud, non-standard units can be misinterpreted, and misleading values are published. To avoid this issue, in the webpages configure the pulse counter unit using standard (SI) units (for example, Wh) and use the pulse weight to convert to the desired unit (for example kWh). For more information, refer to the section *Pulse Digital Input Parameters* in DOCA0172•• *EcoStruxure Panel Server - User Guide*, page 6
- Limitation on SFTP publication - CSV file content not consistent over firmware releases:
  - When using the custom I/O contextualization of a Pulse counter device connected to the embedded input of the Panel Server, the format of the CSV files published through SFTP is not consistent with the format seen with firmware version 001.006.000. From Panel Server firmware version 002.001.000, the csv file displays **Measurement.Io.Count.Measurement** as a column header data label for the parameter **IoCountMeasurement**. Remap ETL applications to take account of this difference.
  - The above limitation and work-around also apply to a Pulse counter device connected downstream to the I/O Smart Link device.

- Limitations on topology publication to the Schneider Electric cloud: all the devices must be connected at least once to the Panel Server to enable the correct topology to be published to the Schneider Electric cloud.

Limitation on Parent/Child Gateway Configuration

- The parent Panel Server is unable to display and manage the measurements values of the digital inputs configured on the child Panel Server gateway. It is recommended to replace the child Panel Server with an I/O Smart Link device to enable the inputs and outputs of the channels configured in the I/O Smart Link to be correctly displayed in the Panel Server webpages and published to any associated Cloud application.
- In a configuration with Panel Server and PowerTag Link, for Energy devices connected downstream to a child PowerTag Link with parent Panel Server gateway, both **Active energy received** and **Active energy delivered** measurements are incorrectly displayed with No data value (NaN) in the Panel Server **Monitoring and Control** webpage. In addition, these measurements are not published to the upstream application.

  As a workaround, view the combined data **Active energy delivered + received**, which is correctly displayed with accurate values in the **Monitoring and Control**, **Home**, and **Trending** webpages and published to the upstream application.

  NOTE: In EcoStruxure Energy Hub (EEH) the combined data **Active energy delivered + received** is not displayed.

Limitations on Trending and Home Menus:

- During a data dump, in some cases the dashboard does not load due to a timeout. When the data dump process is complete, the dashboard loads.
- When activating publication through **Email service for alarms** or **Schneider cloud services** for the first time, you may receive a large number of emails relating to old and existing alarms, especially in the case of long local history. This only occurs once when publication is activated.
- In firmware version 001.007.000, sampled measurements (for example, full-scale voltage phase of carrier input (dbV or dB)) are treated as aggregated data. As a result, an **Invalid request** message is displayed when viewing data in the **Trending** webpage. Update to firmware version 001.008.000 or greater to resolve the issue.
- In the **Trending** menu, some data may be proposed in the filter menu when not applicable. For example, **Breaker close count no reset** and **Breaker trip count** are displayed erroneously in the data filter menu for devices connected downstream to an I/O Smart Link gateway. Selecting such filters has no impact on the data displayed in trending graphs.

Limitations on Custom Device Models

- Due to updated format of custom device models, models created before October 2025 cannot be imported into Panel Server from EPC Web tool. The updated format for custom device models is compatible with Panel Server firmware version 002.004.000 or later.

  For information about creating and modifying custom device models in EPC Web tool, refer to EPC Web.
- Existing current and available versions of models in Panel Server are indicated with a deprecated format icon in the custom device models table in the Panel Server webpages. They continue to be supported.

- Switching between versions in Panel Server webpages depends on the format of the current and available versions, as indicated in the following table:

Current version	Available version	Can be switched?
Deprecated format	Deprecated format	Yes
Deprecated format	Updated format	Yes
Updated format	Deprecated format	No
Updated format	Updated format	Yes

  For a detailed explanation of supported custom device models and associated actions, refer to *Custom Models for Downstream Modbus Devices* in DOCA0172•• *EcoStruxure Panel Server - User Guide*, page 6.
- Backward compatibility with existing custom models after a firmware update:
  1. After updating the Panel Server firmware, if devices associated with a custom model display erroneous data or the custom model can no longer be imported to webpages, update and regenerate the custom model using EPC-Web.
  2. Import the custom model again into the Panel Server.
  3. Perform a **Switch versions and update** action for the custom model.
- Publishing device identification dynamically: Panel Server retrieves identification data for devices dynamically from the device, with the following exceptions:
  - User application name
  - Device family

  The following static values in custom device models are not supported by Panel Server:
  - Hardware revision
  - Software revision
- Units defined in custom measurement are not published to the Cloud.
- For wireless devices connected under a child gateway, if a custom model uses the same name as a predefined model, and devices are already associated with the predefined model, follow this procedure to load the custom model:
  1. Decommission any device already associated with the predefined model.
  2. Load the custom model in the Panel Server.
  3. Associate the devices with the newly loaded custom model.
  4. Publish the topology in case of use of the Panel Server with a Schneider Electric cloud application such EcoStruxure Asset Advisor or EcoStruxure Resource Advisor.

Limitations on Data Sampling, Data Logging and Alarming

- Alarms are not historized or published for devices that have **Disconnected** status at the moment that the remote configuration is received by the Panel Server after publishing a topology.

  Check that all devices are connected before publishing a topology.
- Erroneous **Loss of communication** alarms may be displayed briefly during Panel Server start up after a power cycle. The erroneous alarms disappear after a few seconds. If the alarms are selected for publishing, the appearance and disappearance are historized. There is no impact on other alarms.

- For certain wireless devices, **Over voltage** and **Undervoltage** alarms may be selected and not editable, even where the rated voltage value is not configured for that device.

  Workaround:

  1. Set a nominal rated voltage for those devices. The field becomes mandatory (indicated by red star).
  2. In the webpages at **Data management > Alarms**, **Over voltage** and **Undervoltage** alarms become editable and can be selected or deselected.
- After modifying the data sampling configuration of a device, the following Panel Server webpages are frozen and not available while the changes are being applied:
  - **Home** page
  - **Trending**
  - **Data management** pages
  - **Backup & restore**
  - **Custom models**
- When the user changes the sampling rate of a data measurement, the following behaviors may be observed:
  - 'NaN' or interpolated values might be inserted in the data logged in place of the existing value which indicates the data measurement is no longer correct nor reliable.
  - For Energy data or accumulated data:
    - in the data trends, non-linear trends may be created where linear trends are expected, due to data points where no historical data exists being duplicated from existing data points
    - a ‘Nan’ value might be replaced with a new value, resulting in non-linear trends
- The number of individual data points that can be sampled simultaneously is limited to 5,000 and limited to a flow of 500 data points per minute.
- The number of individual alarms that can be selected for publication is limited to 500. Among the 500 alarms, a maximum of 300 can be from Modbus-SL devices.

Limitations on Modbus Devices

Limitations on Acti9 Smartlink Modbus devices:

- For legacy Acti9 Smartlink Modbus devices, when Panel Server is unable to read the hardware version due to non-standard UTF-8 characters, a replacement character (�) is displayed at **Identification > Hardware revision** in the webpages. Previously the non-standard characters were not decoded and **No data** was displayed.

Limitations on I/O Smart Link devices:

- When commissioning an I/O Smart Link (as a replacement for a legacy Acti9 Smartlink Modbus with firmware version 001.003.nnn) in EcoStruxure Power Commission software, leaving **None** in the **Signal Element** line causes an error when the device is commissioned in the Panel Server. The I/O Smart Link commissioning configuration cannot be saved in the Panel Server.
- I/O Smart Link devices support the following special characters:

ASCII	1	2	4	5	6	7	8	11	12	13	14	15	30	32	33	61	63	64	93	95
Character	space	!	#	$	%	&	‘	*	+	,	-	.	=	?	@	\	^	_	|	~

- Operating time, operation counter, and trip counter not available for **Wired devices** and **Standard I/O**.

Limitations on MasterPacT NT/NW, ComPacT NS, and PowerPacT P/R frame circuit breakers. For details about which trip units and interfaces are supported, refer to:

- Modbus TCP/IP Devices Circuit Breakers and Associated Trip Units connected via IFE and EIFE interfaces, page 27
- Modbus Serial Devices Circuit Breakers and Associated Trip Units connected via IFM interface or BSCM Modbus SL/ULP module, page 30

NOTE: When manually adding a Modbus device, ensure that you select the correct device model from the Device list. The device model name includes information about the trip unit and connection interface or module.

Limitations on Wireless Devices

- For ZBRT pushbutton devices, communication with buttons is lost when the Panel Server changes from one channel to another. Decommission the ZBRT device (refer to the ZBRZ commissioning module instruction sheet NNZ21729) and discover the ZBRT devices again to re-establish communication.
- For Exiway Link devices, light status value (ON, OFF) is relevant only when the device is not in emergency mode.
- Within a parent-child Panel Server gateway configuration, the modification of a contextualized setting of a device to the child Panel Server (for example, auxiliary position modified from SD to SDE) is not automatically reflected in the parent gateway. A manual update in the parent Panel Server is required to display modifications.
- Wireless indication auxiliary: the Panel Server does not manage alarm notification by email or to Schneider Electric cloud applications.
- PowerTag Control:
  - If a PowerTag Control device is connected to a child gateway:
    - No automatic discovery.
    - No data is published to the parent gateway. To be able to publish at the parent gateway level, a custom model has to be developed for the parent gateway.
- PowerTag Display: not supported by Panel Server Advanced.

Limitations on Input Devices Configured as Pulse Counter

Depending on the language of your browser, when entering a value in the Pulse weight field, to add a decimal value (for example 1.5), you may need to copy and paste the value into the field. An error message may pop up to indicate that the value is not valid but the value is used for the calculation of consumption and flow.

Supported Devices

Wireless Devices

The following table shows the minimum Panel Server Advanced firmware version and the minimum firmware version of the wireless device required to enable communication with wireless devices.

Device family	Device		Minimum Panel Server Advanced firmware version	Minimum firmware version of wireless device
Power meter	PowerTag A9 M63 1P+N Bottom	A9MEM1522	001.003.002	004.000.424 (1)
Power meter	PowerTag A9 M63 3P	A9MEM1540	001.003.002	004.000.424 (1)
Power meter	PowerTag A9 M63 3P+N Top	A9MEM1541	001.003.002	004.000.424 (1)
Power meter	PowerTag A9 M63 3P+N Bottom	A9MEM1542	001.003.002	004.000.424 (1)
Power meter	PowerTag A9 M63 3P	A9MEM1543	001.003.002	004.000.424 (1)
Power meter	PowerTag M250 3P 250A	LV434020	001.003.002	001.003.002 (1)
Power meter	PowerTag M250 3P+N 250A	LV434021	001.003.002	001.003.002 (1)
Power meter	PowerTag M630 3P 630A	LV434022	001.003.002	001.003.002 (1)
Power meter	PowerTag M630 3P+N 630A	LV434023	001.003.002	001.003.002 (1)
Power meter	PowerTag A9 M63 1P+W	A9MEM1520	001.003.002	004.000.424 (1)
Power meter	PowerTag A9 M63 1P+N Top	A9MEM1521	001.003.002	004.000.424 (1)
Power meter	PowerTag A9 P63 1P+N Top	A9MEM1560	001.003.002	004.000.424 (1)
Power meter	PowerTag A9 P63 1P+N Top	A9MEM1561	001.003.002	004.000.424 (1)
Power meter	PowerTag A9 P63 1P+N Bottom	A9MEM1562	001.003.002	004.000.424 (1)
Power meter	PowerTag A9 P63 1P+N Bottom RCBO	A9MEM1563	001.003.002	004.000.424 (1)
Power meter	PowerTag A9 F63 1P+N 110V	A9MEM1564	001.003.002	004.000.424 (1)
Power meter	PowerTag A9 F63 3P+N	A9MEM1570	001.003.002	004.000.424 (1)
Power meter	PowerTag A9 P63 3P+N Top	A9MEM1571	001.003.002	004.000.424 (1)
Power meter	PowerTag A9 P63 3P+N Bottom	A9MEM1572	001.003.002	004.000.424 (1)
Power meter	PowerTag A9 F63 3P	A9MEM1573	001.003.002	004.000.424 (1)
Power meter	PowerTag A9 F63 3P+N 110/230V	A9MEM1574	001.003.002	004.000.424 (1)
Power meter	PowerTag A9 F63 3P 480V	A9MEM1575	002.004.000	004.002.000
Power meter	PowerTag F160 3P/3P+N	A9MEM1580	001.003.002	001.001.000 (1)
Power meter	PowerTag Rope 200 A 3P/3P+N	A9MEM1590	001.003.002	001.001.000
Power meter	PowerTag Rope 600 A 3P/3P+N	A9MEM1591	001.003.002	001.001.000
Power meter	PowerTag Rope 1000 A 3P/3P+N	A9MEM1592	001.003.002	001.001.000
Power meter	PowerTag Rope 2000 A 3P/3P+N	A9MEM1593	001.003.002	001.001.000
Power meter	PowerLogic Tag E-Frame 10-60A 1P+N	PLTE601P	001.003.002	004.000.424 (1)

(1) Modbus mapping identical to PowerTag Link

Device family	Device		Minimum Panel Server Advanced firmware version	Minimum firmware version of wireless device
Power meter	PowerLogic Tag E-Frame 10-60A 2P	PLTE602P	001.003.002	004.000.424 (2)
Power meter	PowerLogic Tag E-Frame 10-60A 3P	PLTE603P	001.003.002	004.000.424 (2)
Power meter	PowerLogic Tag QO 10-30A 1P+N	PLTQO301P	001.003.002	004.000.424 (2)
Power meter	PowerLogic Tag QO 10-30A 2P	PLTQO302P	001.003.002	004.000.424 (2)
Power meter	PowerLogic Tag QO 10-30A 3P	PLTQO303P	001.003.002	004.000.424 (2)
Power meter	PowerLogic Tag QO 35-60A 1P+N	PLTQO601P	001.003.002	004.000.424 (2)
Power meter	PowerLogic Tag QO 35-60A 2P	PLTQO602P	001.003.002	004.000.424 (2)
Power meter	PowerLogic Tag QO 35-60A 3P	PLTQO603P	001.003.002	004.000.424 (2)
Power meter	PowerLogic Tag Rope 120A 3P	PLTR1203P	001.003.002	001.001.000
Power meter	PowerLogic Tag Rope 600A 3P	PLTR6003P	001.003.002	001.001.000
Power meter	PowerLogic Tag Rope 1000A 3P	PLTR10003P	001.003.002	001.001.00
Power meter	PowerLogic Tag Rope 2000A 3P	PLTR20003P	001.003.002	001.001.000
Ambient sensor	PowerLogic TH110 wireless thermal sensor	EMS59440	001.003.002	001.000.003 (2)
Ambient sensor	PowerLogic CL110 wireless environmental sensor	EMS59443	001.003.002	002.001.003 (2)
Ambient sensor	ZBRTT1 wireless environmental sensor	ZBRTT1	001.003.002	002.001.003 (2)
Ambient sensor	Wireless CO_2 sensor	SED-CO2-G-5045	001.003.002	001.001.004
Ambient sensor	Wireless temperature and humidity sensor	SED-TRH-G-5045	001.003.002	001.001.004
Ambient sensor	PowerTag Ambient temperature sensor (formerly Eliwell EwSenseTemp sensor, with reference ESST010B0400)	A9XST114	001.003.002	001.001.005
Ambient sensor	PowerLogic HeatTag	SMT10020	001.003.002	002.002.009
Ambient sensor	PowerLogic Thermal Tag wireless temperature sensor	SPTH150S	002.003.000	001.004.001
		SPTH150M	002.003.000	001.004.001
		SPTH200M	002.003.000	001.003.001
Circuit breaker	Acti9 Active iC40 and iC60	A9TAA●●●●	001.003.002	001.000.001
		A9TAB●●●●	001.003.002	001.000.001
		A9TDEC●●●	001.003.002	001.000.001
		A9TDFC●●●	001.003.002	001.000.001
		A9TDFD●●●	001.003.002	001.000.001
		A9TPDD●●●	001.003.002	001.000.001
		A9TPED●●●	001.003.002	001.000.001
		A9TYAE●●●	001.003.002	001.000.001
		A9TYBE●●●	001.003.002	001.000.001
Circuit breaker	Acti9 iCV40N ARC 1PN C6 30mA RCBO AFDZ	A9TDNC606	002.003.000	001.004.000
	Acti9 iCV40N ARC 1PN C10 30mA RCBO AFDZ	A9TDNC610	002.003.000	001.004.000
	Acti9 iCV40N ARC 1PN C16 30mA RCBO AFDZ	A9TDNC616	002.003.000	001.004.000

(2) Modbus mapping identical to PowerTag Link

Device family	Device		Minimum Panel Server Advanced firmware version	Minimum firmware version of wireless device
	Acti9 iCV40N ARC 1PN C25 30mA RCBO AFDZ	A9TDNC625	002.003.000	001.004.000
	Acti9 iCV40N ARC 1PN C32 30mA RCBO AFDZ	A9TDNC632	002.003.000	001.004.000
	Acti9 iCV40N ARC 1PN C40 30mA RCBO AFDZ	A9TDNC640	002.003.000	001.004.000
	Acti9 iCV40H ARC 1PN C6 30mA RCBO AFDZ	A9TDND606	002.003.000	001.004.000
	Acti9 iCV40H ARC 1PN C10 30mA RCBO AFDZ	A9TDND610	002.003.000	001.004.000
	Acti9 iCV40H ARC 1PN C16 30mA RCBO AFDZ	A9TDND616	002.003.000	001.004.000
	Acti9 iCV40H ARC 1PN C20 30mA RCBO AFDZ	A9TDND620	002.003.000	001.004.000
	Acti9 iCV40H ARC 1PN C25 30mA RCBO AFDZ	A9TDND625	002.003.000	001.004.000
	Acti9 iCV40H ARC 1PN C32 30mA RCBO AFDZ	A9TDND632	002.003.000	001.004.000
Circuit breaker	Acti9 Vigi iDT40 25 A 1P+N	A9Y6E625	001.005.000	001.000.001
Circuit breaker	Acti9 Vigi iDT40 40 A 1P+N	A9Y6E640	001.005.000	001.000.001
Circuit breaker	Acti9 Vigi iC40 25 A 1P+N	A9Y8E625	001.005.000	001.000.001
Circuit breaker	Acti9 Vigi iC40 40 A 1P+N	A9Y8E640	001.005.000	001.000.001
Circuit breaker	Acti9 Vigi iC60 25 A 2P	A9V6E225	001.005.000	001.000.001
Circuit breaker	Acti9 Vigi iC60 40 A 2P	A9V6E240	001.005.000	001.000.001
Circuit breaker	Acti9 Vigi iC60 25 A 2P	A9V8E225	001.005.000	001.000.001
Circuit breaker	Acti9 Vigi iC60 40 A 2P	A9V8E240	001.005.000	001.000.001
Circuit breaker	MicroLogic Active AP control unit for MasterPacT MTZ	LV933071W LV933072W LV933073W	002.000.000	002.000.000
Circuit breaker	MicroLogic Active EP control unit for MasterPacT MTZ	LV947600W LV947602W LV947603W	002.000.000	002.000.000
I/O device	Wireless indication auxiliary for ComPacT NSXm and PowerPacT B-frame	LV429453	001.003.002	001.000.000
I/O device	Wireless indication auxiliary for ComPacT NSX, PowerPacT H-, J-, and L-frame, ComPacT NS, and PowerPacT M-, P-frame	LV429454	001.003.002	001.000.000
I/O device	PowerTag C IO 230V digital input output module	A9XMC1D3	001.006.000	002.000.000
I/O device	PowerTag C 2DI 230V digital input module	A9XMC2D3	001.006.000	002.000.000
I/O device	XB5R transmitter for wireless and batteryless pushbutton(3)	ZBRT1	002.002.000	001.000.000
		ZBRT2	002.002.000	001.000.000
Condition monitoring	PowerLogic PD100 Partial discharge monitoring sensor	PD100X001	001.006.000	002.000.000
Safety	Exiway Light Act. connected 42/120 multi	OVA44210	002.000.000	001.001.001
	Exiway Light Act. connected 65/120 multi	OVA44211	002.000.000	001.001.001

(3) When used in conjunction with ZBRZ1 advanced commissioning module for XB5R transmitters

Device family	Device		Minimum Panel Server Advanced firmware version	Minimum firmware version of wireless device
	Exiway Light Act. connected 42/ 200 multi	OVA44212	002.000.000	001.001.001
	Exiway Light Act. connected 65/ 200 multi	OVA44213	002.000.000	001.001.001
	Exiway Light Act. connected 42/ 450 multi	OVA44214	002.000.000	001.001.001
	Exiway Light Act. connected 65/ 450 multi	OVA44215	002.000.000	001.001.001
	Exiway Trend Act. connected 42/120 multi	OVA47210	002.000.000	001.001.001
	Exiway Trend Act. connected 65/120 multi	OVA47211	002.000.000	001.001.001
	Exiway Trend Act. connected 42/200 multi	OVA47212	002.000.000	001.001.001
	Exiway Trend Act. connected 65/200 multi	OVA47213	002.000.000	001.001.001
	Exiway Trend Act. connected 42/450 multi	OVA47214	002.000.000	001.001.001
	Exiway Trend Act. connected 65/450 multi	OVA47215	002.000.000	001.001.001
	Exiway Light device	OVA47222	002.000.000	001.001.001
	Exiway Light device	OVA47223	002.000.000	001.001.001
	Exiway Light device	OVA47224	002.000.000	001.001.001
	Exiway Light device	OVA47225	002.000.000	001.001.001
	Exiway Light EVAC 42 SATI connected	OVA59130	002.000.000	001.001.001
	Exiway Light EVAC 65 SATI connected	OVA59131	002.000.000	001.001.001
	Exiway Light HAB 42 SATI connected	OVA59230	002.000.000	001.001.001
	Exiway Light HAB 65 SATI connected	OVA59231	002.000.000	001.001.001
	Exiway Light AMB 42 SATI connected	OVA59330	002.000.000	001.001.001
	Exiway Light AMB 65 SATI connected	OVA59331	002.000.000	001.001.001
	Exiway Light BIF 42	OVA59430	002.000.000	001.001.001
	Exiway Light BIF 65	OVA59431	002.000.000	001.001.001
	Exiway Light DBR 65	OVA59232	002.000.000	001.001.001

Modbus TCP/IP Devices

The following table shows the minimum Panel Server Advanced firmware version required to enable Ethernet communication with devices for real-time measurement monitoring in Panel Server webpages.

Device family	Device		Minimum Panel Server Advanced firmware version
Power meter	PowerLogic CM3250 circuit monitor		001.003.002
Power meter	PowerLogic CM3350 circuit monitor		001.003.002
Power meter	PowerLogic CM4000 circuit monitor		001.003.002
Power meter	PowerLogic EM3570 energy meter	METSEEM3570	002.005.000
Power meter	PowerLogic EM3570A energy meter	METSEEM3570A	002.005.000
Power meter	PowerLogic EM3570X energy meter	METSEEM3570X	002.005.000
Power meter	PowerLogic EM3570AX energy meter	METSEEM3570AX	002.005.000
Power meter	PowerLogic PM5320 power meter	METSEPM5320	001.003.002
Power meter	PowerLogic PM5340 power meter	METSEPM5340	001.003.002
Power meter	PowerLogic PM5341 power meter	METSEPM5341	001.003.002
Power meter	PowerLogic PM5560 power meter	METSEPM5560	001.003.002
Power meter	PowerLogic PM5561 power meter	METSEPM5561	001.003.002
Power meter	PowerLogic PM5563 power meter	METSEPM5563	001.003.002
Power meter	PowerLogic PM5570 power meter	METSEPM5570	001.003.002
Power meter	PowerLogic PM5580 power meter	METSEPM5580	001.003.002
Power meter	PowerLogic PM5650 power meter	METSEPM5650	001.003.002
Power meter	PowerLogic PM5660 power meter	METSEPM5660	001.003.002
Power meter	PowerLogic PM5661 power meter	METSEPM5661	001.003.002
Power meter	PowerLogic PM5760 power meter	METSEPM5760	001.003.002
Power meter	PowerLogic PM5761 power meter	METSEPM5761	001.003.002
Power meter	PowerLogic PM810 power meter		001.003.002
Power meter	PowerLogic PM820 power meter		001.003.002
Power meter	PowerLogic PM850 power meter		001.003.002
Power meter	PowerLogic PM870 power meter		001.003.002
Power meter	PowerLogic PM8000 power meter	METSEPM8210	001.003.002
		METSEPM8213	001.003.002
		METSEPM8214	001.003.002
		METSEPM8240	001.003.002
		METSEPM8243	001.003.002
		METSEPM8244	001.003.002
		METSEPM82101	001.003.002
		METSEPM82103	001.003.002
		METSEPM82104	001.003.002
		METSEPM82143	001.003.002
		METSEPM82144	001.003.002
		METSEPM82401	001.003.002
		METSEPM82403	001.003.002
		METSEPM82404	001.003.002
		METSEPM82443	001.003.002
		METSEPM82444	001.003.002
Transformer monitoring	NT935 ETH		001.003.002

Circuit Breakers and Associated Trip Units

The following table shows the circuit breaker devices supported by Panel Server Advanced for real-time measurement monitoring in Panel Server webpages.

NOTE: Update associated IFE and EIFE interfaces to firmware version 003.009.010 or later to ensure that measurements are displayed and published correctly in the Panel Server.

The circuit breaker devices and associated trip units are connected to Panel Server through one of the interfaces indicated in the table below.

Y: the device is supported by Panel Server.

N: the device is not yet supported by Panel Server using a pre-defined model. Use a custom model to connect to this device.

N/A: not applicable

Circuit breaker	Trip unit	Connected to				
		IFE Ethernet interface		IFE Ethernet switchboard server		EIFE embedded Ethernet interface
		LV434010	LV434001	LV434011	LV434002	LV851001
MasterPacT MTZ	MicroLogic 2.0 X	Y	Y	Y	Y	Y
	MicroLogic 3.0 X	N	N	N	N	Y
	MicroLogic 5.0 X	N	N	N	N	Y
	MicroLogic 6.0 X	Y	Y	Y	Y	Y
	MicroLogic 7.0 X	N	N	N	N	Y
	MicroLogic 5.0 Xi	Y	Y	Y	Y	Y
MasterPacT NT/NW	MicroLogic 2.0 A	Y	Y	Y	Y	N/A
	MicroLogic 3.0 A	Y	Y	Y	Y	N/A
	MicroLogic 5.0 A	Y	Y	Y	Y	N/A
	MicroLogic 6.0 A	Y	Y	Y	Y	N/A
	MicroLogic 7.0 A	Y	Y	Y	Y	N/A
	MicroLogic 2.0 E	Y	Y	Y	Y	N/A
	MicroLogic 5.0 E	Y	Y	Y	Y	N/A
	MicroLogic 6.0 E	Y	Y	Y	Y	N/A
	MicroLogic 5.0 P	Y	Y	Y	Y	N/A
	MicroLogic 6.0 P	Y	Y	Y	Y	N/A
ComPacT NS	MicroLogic 7.0 A	N	N	N	N	N/A
	MicroLogic 7.0 H	Y	Y	Y	Y	N/A
ComPacT NSX	MicroLogic 5.2 A	Y	Y	Y	Y	N/A
	MicroLogic 6.2 A	Y	Y	Y	Y	N/A
	MicroLogic 5.2 E	Y	Y	Y	Y	N/A
	MicroLogic 6.2 E	Y	Y	Y	Y	N/A
	MicroLogic 7.2 E	Y	Y	Y	Y	N/A
	MicroLogic 5.3 E	Y	Y	Y	Y	N/A
	MicroLogic 6.3 E	Y	Y	Y	Y	N/A
	MicroLogic 7.3 E	Y	Y	Y	Y	N/A
PowerPacT H-, J-, and L-frame	MicroLogic 5.3 A	Y	Y	Y	Y	N/A

Modbus Serial Devices

The following table shows the minimum Panel Server Advanced firmware version required to enable Modbus communication with devices for real-time measurement monitoring in Panel Server webpages.

For third-party devices not listed in the table, data of the device can be accessed by reading the different Modbus registers. All data available from the Modbus registers will not be accessible and displayed in the Panel Server webpages.

Device family	Device		Minimum Panel Server Advanced firmware version
Power meter	PowerLogic CM3250 circuit monitor		001.003.002
Power meter	PowerLogic CM3350 circuit monitor		001.003.002
Power meter	PowerLogic CM4000 circuit monitor		001.003.002
Power meter	PowerLogic EM3550 energy meter		001.003.002
Power meter	PowerLogic EM3550A energy meter		001.003.002
Power meter	PowerLogic EM3555 power and energy meter		001.003.002
Power meter	PowerLogic EM3555A energy meter		001.003.002
Power meter	PowerLogic EM4200 Enercept power and energy meter		001.003.002
Power meter	PowerLogic EM6400NG energy meter	METSEEM6400NGRSCL2	001.003.002
Power meter		METSEEM6400NGRSCL5	001.003.002
Power meter		METSEEM6400NGRSCL1	001.003.002
Power meter	PowerLogic EM6433H energy meter	METSEEM6433HCL10RS	001.003.002
Power meter		METSEEM6433HCL05RS	001.003.002
Power meter	PowerLogic EM6436H energy meter	METSEEM6436HCL10RS	001.003.002
Power meter		METSEEM6436HCL05RS	001.003.002
Power meter	PowerLogic EM7200 power and energy	30002055	001.003.002
		30002198	001.003.002
		30002975	001.003.002
Power meter	EM3100 energy meter	METSEEM3122	002.003.000
	EM3200 energy meter	METSEEM3224	002.003.000
	EM3300 energy meter	METSEEM3322	002.003.000
	EM3400 energy meter	METSEEM3424	002.003.000
	EM3700 energy meter	METSEEM3724	002.003.000
Power meter	EasyLogic PM1130H meter	METSEPM1130HCL05RS	001.003.002
Power meter		METSEPM1130HCL05RD	001.003.002
Power meter	EasyLogic PM2130 meter	METSEPM2130D	001.003.002
Power meter	EasyLogic PM2220 meter	METSEPM2220D	001.003.002
Power meter	EasyLogic PM2220 meter	METSEPM2220	001.003.002
Power meter	EasyLogic PM2230 meter	METSEPM2230D	001.003.002
Power meter	EasyLogic PM2230 meter	METSEPM2230	001.003.002
Power meter	Acti9 iEM2050 energy meter	A9MEM2050	001.003.002
Power meter	Acti9 iEM2055 energy meter	A9MEM2055	001.003.002
Power meter	Acti9 iEM2150 energy meter	A9MEM2150	001.003.002
Power meter	Acti9 iEM2155 energy meter	A9MEM2155	001.003.002
Power meter	Acti9 iEM2155 energy meter	A9MEM2155	001.003.002
Power meter	Acti9 iEM2155 energy meter	A9MEM2155	001.003.002
Power meter	Acti9 iEM2455 energy meter	A9MEM2455	001.003.002
Power meter	Acti9 iEM3150 energy meter	A9MEM3150	001.003.002
Power meter	Acti9 iEM3155 energy meter	A9MEM3155	001.003.002
Power meter	Acti9 iEM3250 energy meter	A9MEM3250	001.003.002

Device family	Device		Minimum Panel Server Advanced firmware version
Power meter	Acti9 iEM3255 energy meter	A9MEM3255	001.003.002
Power meter	Acti9 iEM3350 energy meter	A9MEM3350	001.003.002
Power meter	Acti9 iEM3355 energy meter	A9MEM3355	001.003.002
Power meter	Acti9 iEM3455 energy meter	A9MEM3455	001.003.002
Power meter	Acti9 iEM3555 energy meter	A9MEM3555	001.003.002
Power meter	PowerLogic PM3250 power meter		001.003.002
Power meter	PowerLogic PM3255 power meter		001.003.002
Power meter	PowerLogic PM5110 power meter		001.003.002
Power meter	PowerLogic PM5111 power meter		001.003.002
Power meter	PowerLogic PM5310 power meter		001.003.002
Power meter	PowerLogic PM5330 power meter		001.003.002
Power meter	PowerLogic PM5331 power meter		001.003.002
Power meter	PowerLogic PM5560 power meter		001.003.002
Power meter	PowerLogic PM5561 power meter		001.003.002
Power meter	PowerLogic PM5563 power meter		001.003.002
Power meter	PowerLogic PM5570 power meter	METSEPM5570	001.003.002
Power meter	PowerLogic PM5580 power meter	METSEPM5580	001.003.002
Power meter	PowerLogic PM5650 power meter	METSEPM5650	001.003.002
Power meter	PowerLogic PM5660 power meter	METSEPM5660	001.003.002
Power meter	PowerLogic PM5661 power meter	METSEPM5661	001.003.002
Power meter	PowerLogic PM5760 power meter	METSEPM5760	001.003.002
Power meter	PowerLogic PM5761 power meter	METSEPM5761	001.003.002
Power meter	PowerLogic PM810 power meter		001.003.002
Power meter	PowerLogic PM820 power meter		001.003.002
Power meter	PowerLogic PM850 power meter		001.003.002
Power meter	PowerLogic PM870 power meter		001.003.002
Power meter	PowerLogic PM8000 power meter		001.003.002
I/O module	Acti 9 Smartlink Modbus	A9XMSB11 with FW v001.003.007	001.003.002
I/O module	I/O Smart Link	A9XMSB11 with FW v003.00X.00Y	001.007.000
I/O module	Acti 9 Smartlink SI B	A9XMZA08	001.003.002
Protection relay	Easergy Sepam Series 20 BSTM protection relay		001.003.002
Protection relay	Easergy Sepam Series 40 protection relay		001.003.002
Transformer monitoring	NT935		001.003.002
Passive power correction	PowerLogic power factor controller VarPlus Logic VL6		001.004.000
Passive power correction	PowerLogic power factor controller VarPlus Logic VL12		001.004.000
Insulation monitoring	Vigilohm IM20 insulation monitoring device (4)	IMD-IM20	001.005.001
Insulation monitoring	Vigilohm IM20H insulation monitoring device(4)	IMD-IM20–H	001.005.001
Insulation monitoring	Vigilohm IM400 insulation monitoring device(4)	IMD-IM400	001.005.001
Insulation monitoring	Vigilohm IM400C insulation monitoring device(4)	IMD-IM400C	001.005.001
Insulation monitoring	Vigilohm IM400L insulation monitoring device(4)	IMDIM400L	001.005.001
Insulation monitoring	Vigilohm IM400N insulation monitoring device(4)	IMDIM400N	001.005.001

(4) Device integrated only for data publication not for alarms

Device family	Device		Minimum Panel Server Advanced firmware version
Insulation monitoring	Vigilohm IM400LTHR insulation monitoring device(5)	IMDIM400LTHR	001.005.001
Insulation monitoring	Vigilohm IM400THR insulation monitoring device(5)	IMDIM400THR	001.005.001
Insulation monitoring	Vigilohm IM400THRN insulation monitoring device(5)	IMDIM400THRN	001.005.001
Insulation monitoring	Vigilohm IMDIFL12MCT insulation fault locator(5)		001.005.001

Circuit Breakers and Associated Trip Units

The following table shows the Modbus-SL circuit breaker devices supported by Panel Server Advanced for real-time measurement monitoring in Panel Server webpages.

NOTE: Update associated IFM interface LV434000 to firmware version 003.001.010 or later to ensure that measurements are displayed and published correctly in the Panel Server.

The circuit breaker devices and associated trip units are connected to Panel Server through the interface or module indicated in the table below.

Y: the device is supported by Panel Server

N: the device is not yet supported by Panel Server using a pre-defined model. Use a custom model to connect to this device.

N/A: not applicable

Circuit breaker	Trip unit	Connected to		
		IFM Modbus-SL interface		BSCM Modbus SL/ULP Module
		TVR00210	LV434000	LV434220
MasterPacT MTZ	MicroLogic 2.0 X	N/A	Y	N/A
	MicroLogic 3.0 X	N/A	Y	N/A
	MicroLogic 5.0 X	N/A	Y	N/A
	MicroLogic 6.0 X	N/A	Y	N/A
	MicroLogic 7.0 X	N/A	Y	N/A
	MicroLogic 5.0 Xi	N/A	N	N/A
MasterPacT NT/NW	MicroLogic 2.0 A	N	N	N/A
	MicroLogic 3.0 A	N	N	N/A
	MicroLogic 5.0 A	N	N	N/A
	MicroLogic 6.0 A	N	N	N/A
	MicroLogic 7.0 A	Y	Y	N/A
	MicroLogic 2.0 E	N	N	N/A
	MicroLogic 5.0 E	N	N	N/A
	MicroLogic 6.0 E	N	N	N/A
	MicroLogic 5.0 P	Y	Y	N/A
	MicroLogic 6.0 P	Y	Y	N/A
ComPacT NS	MicroLogic 7.0 A	Y	Y	N/A
	MicroLogic 7.0 H	N	N	N/A
ComPacT NSX	MicroLogic 5.2 A	N	N	Y

(5) Device integrated only for data publication not for alarms

Circuit breaker	Trip unit	Connected to		
		IFM Modbus-SL interface		BSCM Modbus SL/ULP Module
		TVR00210	LV434000	LV434220
	MicroLogic 6.2 A	Y	Y	Y
	MicroLogic 5.2 E	Y	Y	Y
	MicroLogic 6.2 E	Y	Y	Y
	MicroLogic 7.2 E	Y	Y	Y
	MicroLogic 5.3 E	Y	Y	Y
	MicroLogic 6.3 E	N	N	Y
	MicroLogic 7.3 E	Y	Y	Y
PowerPacT H-, J-, and L-frame	MicroLogic 5.2 A	N	N	Y
	MicroLogic 5.3 A	N	N	Y
	MicroLogic 6.2 A	N	N	Y
	MicroLogic 5.2 E	N	N	Y
	MicroLogic 6.2 E	N	N	Y
	MicroLogic 7.2 E	N	N	Y
	MicroLogic 5.3 E	N	N	Y
	MicroLogic 6.3 E	N	N	Y
	MicroLogic 7.3 E	N	N	Y

Appendix: Previous Firmware Versions

Firmware Version 002.004.000

New Features for Firmware Version 002.004.000

- **Security improvements** in EcoStruxure Panel Server:
  - Security patch
- **Zone** added to contextualization data for all devices.

  Devices can be grouped by **Zone** in the **Device list** in the following webpages:
  - **Monitoring & Control**
  - **Trending**
  - **Data Management**

    NOTE: Zone data is not published to Cloud or to SFTP or HTTPS servers, and it is not exported in a local csv export or Trending data export.

  For more information about creating, modifying, deleting zones, and assigning devices to a zone, refer to DOCA0172•• *EcoStruxure Panel Server - User Guide*, page 6.

  NOTE: Load zone is no longer available for **Associated circuit breakers**. **Zone** is added instead in Contextualization data. Existing **Load zone** names are not migrated to **Zone** contextualization data.
- Introduction of dynamic connection timeout polling strategy to help avoid overloading the Modbus communication network. When a device transitions to **Not Connected** state, the connection checker uses an incremental delay strategy (doubling of polling period) to manage connection polling intervals. The polling interval increases progressively as follows:
  - 30 seconds
  - 1 minute
  - 2 minutes
  - 4 minutes
  - 8 minutes
  - 15 minutes (maximum value)

  Once the polling interval reaches 15 minutes, the system continues to poll at this interval until a change in the device health state is detected and the device returns to **Connected** state. The polling interval then returns to the communication period set for the device.
- Support for new format of custom device models created in EPC Web tool. The new format includes the following features:
  - Enumerated values for measurements, based on a dictionary which is shared between EPC Web tool and EcoStruxure Panel Server. When creating the custom model in EPC Web tool, check in the device documentation that the measurement values you select are correct for the measurement.

    NOTE: If there is a mismatch, the measurement is displayed in the Panel Server webpages as 'No data' and with an icon indicating that the data measurement value is out-of-date or invalid.
  - Identification data of a device associated with a custom device model is retrieved dynamically from the device itself.

  For more information, refer to Limitations on Custom Device Models

- Support for the following new air quality measurements managed via a custom device model:
  - Volatile organic compounds (as a percentage)
  - Particle matter with a diameter of 1.0 µm or less (as a percentage)
  - Particle matter with a diameter of 2.5 µm or less (as a percentage)
  - Particle matter with a diameter of 4.0 µm or less (as a percentage)
  - Particle matter with a diameter of 10 µm or less (as a percentage)
  - Pressure (in Pa)
  - Sound pressure level (in dB)
  - Illuminance (in lx)
  - Concentration of formaldehydes (as a percentage)
  - NO and NO_2 concentration (as a percentage)
- Recommendations for optimizing networks with Modbus devices added to DOCA0172•• *EcoStruxure Panel Server - User Guide*, page 6.

Advanced features:

- Addition of scan function management for IEEE 802.15.4 wireless devices. The scan function of connected devices can be disabled or enabled, depending on the device. When disabled, it helps to prevent disturbance on other IEEE 802.15.4 wireless devices. It is important to understand the consequences of this action before disabling the function. For more information, refer to DOCA0172•• *EcoStruxure Panel Server - User Guide*, page 6.

New Supported Devices

- PowerTag Energy A9MEM1575 compliant with both IEC and UL standards.

Major Fixes for Firmware Version 002.004.000

- Wireless devices were intermittently unable to perform a command sent from the Panel Server and the message **Action already in progress** was displayed in the webpages.
- A remote configuration was not applied successfully if some Modbus devices experienced communication issues with the Panel Server at the moment that the remote configuration was received from the Cloud. The **Last remote configuration status** may be indicated as **Reset to blank state**.

Firmware Version 002.003.000

New Features for Firmware Version 002.003.000

- **Security improvements** in EcoStruxure Panel Server:
  - Security patch

- Addition of support for a Modbus serial device associated with multiple meters. The meters must share the same Unit ID and must be added using custom models. For example, the Rayleigh multi-circuit meter can be configured as:
  - Either 2 three-phase circuits, using 2 dedicated custom models
  - Or 6 single-phase circuits, using 6 dedicated custom models

  The 2 or 6 circuits are added manually to the Panel Server as Modbus devices at **Settings > Modbus devices > Modbus TCP/IP > Manual addition**, using a specific custom model for each circuit. The 2 or 6 devices must share the same:
  - Unit ID
  - IP address
  - Port
- Improved contextualization information: Alarm name is available in alarm notifications sent to cloud applications and by email for the following devices:
  - Devices connected to digital inputs 1 and 2 configured as Standard IO
  - Devices connected to digital inputs 1 and 2 of the channels of I/O Smart Link, Acti9 Smartlink Modbus, Acti9 Smartlink SI B devices
  - Devices connected to digital inputs 1 and 2 of PowerTag C 2DI
  - Devices connected to digital input of PowerTag C IO (if output is configured without feedback loop)
  - Wireless indication auxiliary for ComPacT NSXm and PowerPacT B-frame
  - Wireless indication auxiliary for ComPacT NSX, PowerPacT H-, J-, L-frame, ComPacT NS, and PowerPacT M-, P-frame
- Introduced logic code **INT64ToFloat32** to convert INT64 values to Float32 values.
- The following obsolete Modbus built-in device models are no longer supported:
  - apas
  - bpas
  - bcpm a
  - bcpm b
  - bcpm c
  - masterpact_nt_nw_a (MasterPacT NT/NW with MicroLogic A connected directly to BCM ULP serial line without IFE/IFM interface)
  - masterpact_nt_nw_e (MasterPacT NT/NW with MicroLogic E connected directly to BCM ULP serial line without IFE/IFM interface)
  - masterpact_nt_nw_h (MasterPacT NT/NW with MicroLogic H connected directly to BCM ULP serial line without IFE/IFM interface)
  - masterpact_nt_nw_p (MasterPacT NT/NW with MicroLogic P connected directly to BCM ULP serial line without IFE/IFM interface)

  Devices associated with these obsolete models are henceforth listed as unknown devices. Historized alarms are retained.

  If you use these device models, export associated data before updating the Panel Server firmware. After the firmware update, remove the unknown devices and add them manually by creating a custom device model, or by using an existing built-in model. Refer to the list of supported circuit breakers and associated trip units, page 22.
- The following measurements associated with MasterPacT MTZ devices no longer supported:
  - Circuit breaker total durability
  - Circuit breaker service life loaded wear ratio
  - Number of operations with load > 0
  - Circuit breaker service life wear ratio (with and without load)

- Management of measurements from MasterPacT MTZ circuit breakers connected through IFE, EIFE or IFM interfaces. Update the interface to the latest supported version to ensure correct display of data:
  - For IFE and EIFE interfaces, update the interface to firmware version 003.009.010 or later
  - For IFM interfaces, update the interface to firmware version 003.001.010 or later
- Additional Modbus settings are available for Modbus registers via Modbus address 255. The following parameters can be consulted:
  - **Modbus TCP/IP server settings:**
    - Message timeout Modbus TCP/IP server)
  - **Modbus TCP/IP client settings:**
    - Timeout of Modbus TCP/IP client
    - Message timeout of Modbus TCP/IP client request
  - **Modbus SL settings for downstream communication:**
    - Silent interval after Modbus SL packet end
    - Delay between Modbus SL packets
    - Connect/Disconnect the RS485 termination resistor
    - Transmission line state
  - **Modbus SL client settings**
    - Message timeout of Modbus SL request
- For Panel Server embedded digital inputs configured as Pulse counter, **Water volume** and **Gas volume** can be displayed and published with Float32 Modbus registers to improve precision to three decimal places. Existing INT64 Modbus registers are also available. For more information, refer to DOCA0241EN *EcoStruxure Panel Server - Modbus File*.

New Supported Wireless Devices

- The following references of PowerLogic Thermal Tag wireless temperature sensors
  - SPTH150S self-powered wireless thermal sensor
  - SPTH150M self-powered wireless thermal sensor with 3 probes
  - SPTH200M wireless thermal sensor with 4 probes
- The following references of Acti9 Active iCV40H ARC without overvoltage protection alarm:
  - A9TDNC606
  - A9TDNC610
  - A9TDNC616
  - A9TDNC625
  - A9TDNC632
  - A9TDNC640
  - A9TDND606
  - A9TDND610
  - A9TDND616
  - A9TDND620
  - A9TDND625
  - A9TDND632

New Supported Modbus Devices

- The following references of PowerLogic EM3100, EM3200, EM3300, EM3400 and EM3700 energy meters. The devices can be discovered by the Panel Server using the built-in device model em3000:
  - METSEEM3122
  - METSEEM3224
  - METSEEM3322
  - METSEEM3424
  - METSEEM3724

User Interface Improvements

- Improved user experience in device pages by adding icon to collapse left pane (device tree) to maximize screen space.
- Improved webpage header with reorganization of Service status display. Drop down list of services in page header gives summary of the status via an icon , and a link to the **Settings** page of each service.
- In **Settings > Modbus devices > Device addition > Manual addition**, added search function in the **Device** list to facilitate device search.
- In **Monitoring & Control > Multi device view**, **Device range** information added to overview for improved context.
- Improved user experience in **Settings > Wireless devices > Discovery** by adding text to clarify use of discovery methods.

Major Fixes for Firmware Version 002.003.000

The following bugs are fixed in firmware version 002.003.000:

- Instability experienced with connection to Wi-Fi infrastructure
- Certain custom models created in EPC-Web tool after January 2025 were not compatible with Panel Server running firmware version 002.001.000. The import of the custom model was unsuccessful. For more information about compatibility, refer to the Custom Model Compatibility table in DOCA0172•• *EcoStruxure Panel Server - User Guide*, page 6.
- For devices configured as Standard I/O and with I/O Contextualization set as Motor start, available values were **On** or **Off** and alarm was generated when the status passed from **On** to **Off**. From Panel Server firmware version 002.003.000, available values are **Started** and **Not started**, and alarm is generated when the status passes from **Not started** to **Started**. Historized data maintains the legacy terminology for data and events prior to update to firmware version 002.003.000, and new terminology for data and events after the update.

  NOTE: Check that your configuration takes into account this change to avoid spurious alarms.
- When using the custom I/O contextualization of a Pulse counter device connected to the embedded input of the Panel Server, the format of the CSV files published through SFTP was not consistent with the format seen with firmware version 001.006.000. To see the data label **IoCountMeasurement** in CSV scripts, you needed to enter *IoCountMeasurement* in the **Consumption meter element name** field on the Panel Server web pages at **Settings > Embedded input management**.

  IMPORTANT: From Panel Server firmware version 002.001.000, the csv file displays **Measurement.IoCountMeasurement** as a column header data label for the parameter **IoCountMeasurement**. Remap ETL applications to take account of this difference.

Firmware Version 002.002.001

New Features for Firmware Version 002.002.001

- **Security improvements** in Panel Server: Password policy reinforced with obligation to set password at first log-in
- Improvement in tracking management of alarm notification by email: Audit log events added for the following activities:
  - Email alarm publication activated or deactivated
  - Email address added or deleted

Firmware Version 002.002.000

New Features for 002.002.000

- **Security improvements** in Panel Server:
  - Password policy reinforced with new rules. Follow the new rules from your next password update. For more information about Password Requirements, refer to DOCA0172•• *EcoStruxure Panel Server - User Guide*, page 6.
  - **Protect Plus**: Install code introduced for discovery with heightened security of 16-character RF-ID wireless devices.
- Wi-Fi access point allows you to use a PC to connect to the Wi-Fi network of the Panel Server, providing access to Panel Server webpages for device configuration, monitoring and firmware update.
- Custom models can now include the Modbus discovery rules, which allows the Panel Server to use custom models in addition to built-in models to discover Modbus devices, without the need to use manual addition.
- New supported devices: XB5R transmitters: ZBRT1 and ZBRT2. For more information about adding and removing ZBRT devices, refer to DOCA0172•• *EcoStruxure Panel Server - User Guide*, page 6.
- Support for new measurements for motor controller devices:
  - Pole state
  - Contactor state
  - Speed setpoint
  - Motor speed
  - Direction of motor rotation
- Introduction of maximum number of 50 custom models imported to Panel Server. Each model can have one current version and one available version.

User Interface Improvements

- **Monitoring & Control** webpage:
  - Devices sorted by alphabetical usage in tree view. Devices with no usage assigned are displayed in a **No usage** category, at the end of the list. Each usage can be collapsed to improve clarity of display.
  - Width of first column is reduced in multi-device view to improve display.
  - A new data type **Health state** can be selected for display in multi-device view, with the following data:
    - Battery voltage
    - Internal temperature
    - RSSI link
- **Data management** webpage: Devices are sorted by alphabetical usage in tree view. Devices with no usage assigned are displayed in a **No usage** category, at the end of the list. Each usage can be collapsed to improve clarity of display.
- **Trending** webpage
  - In **Device** view, when more than one custom device is discovered using the same custom model, the device name is added to its associated measurement in the **Data** drop down list. This enables you to select the measurement associated with the device more easily.
  - In the **Devices** drop-down menu, devices are sorted by usage.
- RF-ID of device is displayed in **Settings > Wireless devices** in the header for each wireless device

Major Fixes for Version 002.002.000

The following bugs are fixed in Panel Server firmware version 002.002.000:

- Modbus devices associated with a custom model and supporting only Function code 04 were displayed as **Not connected** in the Panel Server after upgrading the Panel Server to firmware version 002.000.000.
- Energy meters in the iEM2050 family displayed unstable connected/ disconnected status in Panel Server webpages.
- Connection to a hidden network was not supported.

Performance and Limitations for 002.002.000

General Performance and Limitations

- For any data conversion to INT64 using logic codes, the largest number that can be accurately represented is 9007199254740991. Any number larger than this will not be precise.
- Web browser Mozilla Firefox not supported.
- No manual addition of wireless devices connected to a child/downstream gateway by using EcoStruxure Power Commission software.
- Automatic discovery of wireless devices under a child gateway is limited to 128 devices because wireless devices are seen as Modbus TCP/IP devices.
- Typical Panel Server latency between Modbus TCP/IP request forwarded to the Modbus serial network is 10 ms.
- Some device identification data of the aggregated devices connected downstream from a Smartlink SI B or Smartlink SI D (such as I/O Smart Link or wireless devices) are displayed in the Panel Server webpage if the data is configured and commissioned from the Smartlink SI B or Smartlink SI D webpage.
- Keep firmware up to date in order to allow the Schneider Electric Customer Care Center to remotely access the Panel Server webpages.

  Remote access certificates for each firmware version are valid up to the dates indicated in the table.

Panel Server firmware version	Remote access certificate validity date
002.005.000	08 October 2026
002.004.000	10 August 2026
002.003.000	07 May 2026

  For more information about Firmware Update, refer to DOCA0172•• *EcoStruxure Panel Server - User Guide*, page 6.

Limitations on Publication

- For legacy Smartlink devices and embedded input devices, configured as Pulse counter, when publication is to Schneider Electric cloud, non-standard units can be misinterpreted, and misleading values are published. To avoid this issue, in the webpages configure the pulse counter unit using standard (SI) units (for example, Wh) and use the pulse weight to convert to the desired unit (for example kWh). For more information, refer to the section *Pulse Digital Input Parameters* in DOCA0172•• *EcoStruxure Panel Server - User Guide*, page 6

- Limitation on SFTP publication - CSV file content not consistent over firmware releases:
  - When using the custom I/O contextualization of a Pulse counter device connected to the embedded input of the Panel Server, the format of the CSV files published through SFTP is not consistent with the format seen with firmware version 001.006.000. To see the data label **IoCountMeasurement** in your CSV scripts, enter *IoCountMeasurement* in the **Consumption meter element name** field on the Panel Server web pages at **Settings > Embedded input management**.
  - The above limitation and work-around also apply to a Pulse counter device connected downstream to the I/O Smart Link device.
- Limitations on topology publication to the Schneider Electric cloud: all the devices must be connected at least once to the Panel Server to enable the correct topology to be published to the Schneider Electric cloud.

Limitation on Parent/Child Gateway Configuration

- The parent Panel Server is unable to display and manage the measurements values of the digital inputs configured on the child Panel Server gateway. It is recommended to replace the child Panel Server with an I/O Smart Link device to enable the inputs and outputs of the channels configured in the I/O Smart Link to be correctly displayed in the Panel Server webpages and published to any associated Cloud application.
- In a configuration with Panel Server and PowerTag Link, for Energy devices connected downstream to a child PowerTag Link with parent Panel Server gateway, both **Active energy received** and **Active energy delivered** measurements are incorrectly displayed with No data value (NaN) in the Panel Server **Monitoring and Control** webpage. In addition, these measurements are not published to the upstream application.

  As a workaround, view the combined data **Active energy delivered + received**, which is correctly displayed with accurate values in the **Monitoring and Control**, **Home**, and **Trending** webpages and published to the upstream application.

  NOTE: In EcoStruxure Energy Hub (EEH) the combined data **Active energy delivered + received** is not displayed.

Limitations on Trending and Home Menus:

- During a data dump, in some cases the dashboard does not load due to a timeout. When the data dump process is complete, the dashboard loads.
- When activating publication through **Email service for alarms** or **Schneider cloud services** for the first time, you may receive a large number of emails relating to old and existing alarms, especially in the case of long local history. This only occurs once when publication is activated.
- In firmware version 001.007.000, sampled measurements (for example, full-scale voltage phase of carrier input (dbV or dB)) are treated as aggregated data. As a result, an **Invalid request** message is displayed when viewing data in the **Trending** webpage. Update to firmware version 001.008.000 or greater to resolve the issue.
- In the **Trending** menu, some data may be proposed in the filter menu when not applicable. For example, **Breaker close count no reset** and **Breaker trip count** are displayed erroneously in the data filter menu for devices connected downstream to an I/O Smart Link gateway. Selecting such filters has no impact on the data displayed in trending graphs.

Limitations on Custom Device Models

- Backward compatibility with existing custom models after a firmware update: After updating the Panel Server firmware, if devices associated with a custom model display erroneous data, or cannot be imported, follow this workaround:
  1. After updating the Panel Server firmware, if devices associated with a custom model display erroneous data or the custom model can no longer be imported to webpages, update and regenerate the custom model using EPC-Web.
  2. Import the custom model again into the Panel Server.
  3. Perform a **Switch versions and update** action for the custom model.
- Units defined in custom measurement are not published to the Cloud.
- For wireless devices connected under a child gateway, if a custom model uses the same name as a predefined model, and devices are already associated with the predefined model, follow this procedure to load the custom model:
  1. Decommission any device already associated with the predefined model.
  2. Load the custom model in the Panel Server.
  3. Associate the devices with the newly loaded custom model.
  4. Publish the topology in case of use of the Panel Server with a Schneider Electric cloud application such EcoStruxure Asset Advisor or EcoStruxure Resource Advisor.

Limitations on Data Sampling, Data Logging and Alarming

- Alarms are not historized or published for devices that have **Disconnected** status at the moment that the remote configuration is received by the Panel Server after publishing a topology.

  Check that all devices are connected before publishing a topology.
- Erroneous **Loss of communication** alarms may be displayed briefly during Panel Server start up after a power cycle. The erroneous alarms disappear after a few seconds. If the alarms are selected for publishing, the appearance and disappearance are historized. There is no impact on other alarms.
- For certain wireless devices, **Over voltage** and **Undervoltage** alarms may be selected and not editable, even where the rated voltage value is not configured for that device.

  Workaround:
  1. Set a nominal rated voltage for those devices. The field becomes mandatory (indicated by red star).
  2. In the webpages at **Data management > Alarms**, **Over voltage** and **Undervoltage** alarms become editable and can be selected or deselected.
- After modifying the data sampling configuration of a device, the following Panel Server webpages are frozen and not available while the changes are being applied:
  - **Home** page
  - **Trending**
  - **Data management** pages
  - **Backup & restore**
  - **Custom models**

- When the user changes the sampling rate of a data measurement, the following behaviors may be observed:
  - 'NaN' or interpolated values might be inserted in the data logged in place of the existing value which indicates the data measurement is no longer correct nor reliable.
  - For Energy data or accumulated data:
    - in the data trends, non-linear trends may be created where linear trends are expected, due to data points where no historical data exists being duplicated from existing data points
    - a ‘Nan’ value might be replaced with a new value, resulting in non-linear trends
- The number of individual data points that can be sampled simultaneously is limited to 5,000 and limited to a flow of 500 data points per minute.
- The number of individual alarms that can be selected for publication is limited to 500. Among the 500 alarms, a maximum of 300 can be from Modbus-SL devices.

Limitations on Modbus Devices

Limitations on Acti9 Smartlink Modbus devices:

- For legacy Acti9 Smartlink Modbus devices, when Panel Server is unable to read the hardware version due to non-standard UTF-8 characters, a replacement character (�) is displayed at **Identification > Hardware revision** in the webpages. Previously the non-standard characters were not decoded and **No data** was displayed.

Limitations on I/O Smart Link devices:

- When commissioning an I/O Smart Link (as a replacement for a legacy Acti9 Smartlink Modbus with firmware version 001.003.nnn) in EcoStruxure Power Commission software, leaving **None** in the **Signal Element** line causes an error when the device is commissioned in the Panel Server. The I/O Smart Link commissioning configuration cannot be saved in the Panel Server.
- I/O Smart Link devices support the following special characters:

ASCII	1	2	4	5	6	7	8	11	12	13	14	15	30	32	33	61	63	64	93	95
Character	space	!	#	$	%	&	‘	*	+	,	-	.	=	?	@	\	^	_	|	~

- Operating time, operation counter, and trip counter not available for **Wired devices** and **Standard I/O**.

Limitations on MasterPacT NT/NW, ComPacT NS, and PowerPacT P/R frame circuit breakers. For details about which trip units and interfaces are supported, refer to:

- Modbus TCP/IP Devices Circuit Breakers and Associated Trip Units connected via IFE and eIFE interfaces, page 27
- Modbus Serial Devices Circuit Breakers and Associated Trip Units connected via IFM interface or BSCM Modbus SL/ULP module, page 30

NOTE: When manually adding a Modbus device, ensure that you select the correct device model from the Device list. The device model name includes information about the trip unit and connection interface or module.

Limitations on Wireless Devices

- For ZBRT pushbutton devices, communication with buttons is lost when the Panel Server changes from one channel to another. Decommission the ZBRT device (refer to the ZBRZ commissioning module instruction sheet NNZ21729) and discover the ZBRT devices again to re-establish communication.

- For Exiway Link devices, light status value (ON, OFF) is relevant only when the device is not in emergency mode.
- Within a parent-child Panel Server gateway configuration, the modification of a contextualized setting of a device to the child Panel Server (for example, auxiliary position modified from SD to SDE) is not automatically reflected in the parent gateway. A manual update in the parent Panel Server is required to display modifications.
- Wireless indication auxiliary: the Panel Server does not manage alarm notification by email or to Schneider Electric cloud applications.
- PowerTag Control:
  - If a PowerTag Control device is connected to a child gateway:
    - No automatic discovery.
    - No data is published to the parent gateway. To be able to publish at the parent gateway level, a custom model has to be developed for the parent gateway.
- PowerTag Display: not supported by Panel Server Advanced.

Limitations on Input Devices Configured as Pulse Counter

Depending on the language of your browser, when entering a value in the Pulse weight field, to add a decimal value (for example 1.5), you may need to copy and paste the value into the field. An error message may pop up to indicate that the value is not valid but the value is used for the calculation of consumption and flow. Consumption and flow results displayed in the **Monitoring and Control** webpage are rounded to the nearest integer.

Firmware Version 002.001.000

New Features for Version 002.001.000

- Support for the following commands from cloud to Exiway Link devices
  - Locate an Exiway Link device to make it blink for five minutes
  - Disable or enable periodic tests
  - Start functional test
  - Switch light on or off
  - Synchronize Exiway Link devices
- Addition of the following commands from webpages to Exiway Link devices:
  - Locate an Exiway Link device to make it blink for five minutes
  - Disable or enable periodic tests
  - Start functional test
- Addition of sampling and publication of following real-time environmental measurements, depending on device connected:
  - Battery voltage
  - Internal temperature
  - RSSI link
- Addition of export of data selected and displayed on **Trending** page

Panel Server webpage user experience improvements:

- **Monitoring and Control** page organized with two views:
  - **Device view**: device-centric view allows you to display data for one device. Data is displayed as widgets for each data type.
  - **Multi-device view**: select up to 5 devices and 2 data types to display. The selection is maintained when clicking away and returning. A link on each device name displays the device view directly.
- Addition of alarm severity in Data management page for individual devices.
- Wireless device connection status indicator: added connection status in orange for reduced connection quality with possible loss of communication.
- Link from **Notifications** page to **Monitoring & Control** page for individual device to see details of alarm.
- In Publication settings, addition of **Include past data** toggle switch to allow the choice of including all past date (up to three months) in first publication.
- In Trending pages, display data by selecting from the following options:
  - **Individual usages**: one or several
  - **Main usages**: six main usages by consumption
  - **All usages**: exhaustive list of data

Major Fixes for Version 002.001.000

The following bugs are fixed in Panel Server firmware version 002.001.000:

- Wi-Fi signal strength icon on Panel Server webpage **Wi-Fi infrastructure** did not display correct signal strength.
- Acti9 Active devices blocked the publication of the Panel Server topology.
- Power meter models PM5340 and PM5341 displayed as unknown devices when discovered by the Panel Server.
- Certain special characters were not accepted in the password when connecting to the SFTP server or the HTTPS server.

- In the Local export csv file from a Panel Server Advanced, the following information was missing:
  - Measurement units
  - Certain measurement names when the export included all devices
- Erroneous **Loss of communication** alarms may have been displayed briefly during Panel Server start up after a power cycle.

Performance and Limitations for Version 002.001.000

General Performance and Limitations

- Connection to a hidden Wi-Fi network is not supported.
- Web browser Mozilla Firefox not supported
- No manual addition of wireless devices connected to a child/downstream gateway by using EcoStruxure Power Commission software.
- Automatic discovery of wireless devices under a child gateway is limited to 128 devices because wireless devices are seen as Modbus TCP/IP devices.
- Typical Panel Server latency between Modbus TCP/IP request forwarded to the Modbus serial network is 10 ms.
- Some device identification data of the aggregated devices connected downstream from a Smartlink SI B or Smartlink SI D (such as I/O Smart Link or wireless devices) are displayed in the Panel Server webpage if the data is configured and commissioned from the Smartlink SI B or Smartlink SI D webpage.
- Keep firmware up to date in order to allow the Schneider Electric Customer Care Center to remotely access the Panel Server webpages.

  Remote access certificates for each firmware version are valid up to the dates indicated in the table.

Panel Server firmware version	Remote access certificate validity date
002.005.000	08 October 2026
002.004.000	10 August 2026
002.003.000	07 May 2026

  For more information about Firmware Update, refer to DOCA0172•• *EcoStruxure Panel Server - User Guide*, page 6.

Limitations on Publication

- For SmartLink SIB devices , SmartLink legacy version 001.003.007 and embedded input devices, configured as Pulse counter, when publication is to Schneider Electric cloud, non-standard units can be misinterpreted, and misleading values are published. To avoid this issue, in the webpages configure the pulse counter unit using standard (SI) units (for example, Wh) and use the pulse weight to convert to the desired unit (for example kWh). For more information, refer to the section *Pulse Digital Input Parameters* in DOCA0172•• *EcoStruxure Panel Server - User Guide*, page 6
- When exporting CSV files to SFTP or HTTPS servers, an excessively large volume of data can result in empty export files. Reduce the publication period and perform the export again.

- Limitation on SFTP publication - CSV file content not consistent over firmware releases:
  - When using the custom I/O contextualization of a Pulse counter device connected to the embedded input of the Panel Server, the format of the CSV files published through SFTP is not consistent with the format seen with firmware version 001.006.000. To see the data label **IoCountMeasurement** in your CSV scripts, enter *IoCountMeasurement* in the **Consumption meter element name** field on the Panel Server web pages at **Settings > Embedded input management**.
  - The above limitation and work-around also apply to a Pulse counter device connected downstream to the I/O Smart Link device.
- Limitations on topology publication to the Schneider Electric cloud: all the devices must be connected at least once to the Panel Server to enable the correct topology to be published to the Schneider Electric cloud.

Limitation on Parent/Child Gateway Configuration

- For devices discovered in a child Panel Server gateway, the parameter settings entered in the child gateway are not transferred to the parent Panel Server gateway.
- The parent Panel Server is unable to display and manage the measurements values of the digital inputs configured on the child Panel Server gateway. It is recommended to replace the child Panel Server with an I/O Smart Link device to enable the inputs and outputs of the channels configured in the I/O Smart Link to be correctly displayed in the Panel Server webpages and published to any associated Cloud application.
- In a configuration with Panel Server and PowerTag Link, for Energy devices connected downstream to a child PowerTag Link with parent Panel Server gateway, both **Active energy received** and **Active energy delivered** measurements are incorrectly displayed with No data value (NaN) in the Panel Server **Monitoring and Control** webpage. In addition, these measurements are not published to the upstream application.

  As a workaround, view the combined data **Active energy delivered + received**, which is correctly displayed with accurate values in the **Monitoring and Control**, **Home**, and **Trending** webpages and published to the upstream application.

  NOTE: In EcoStruxure Energy Hub (EEH) the combined data **Active energy delivered + received** is not displayed.

Limitations on Trending and Home Menus:

- During a data dump, in some cases the dashboard does not load due to a timeout. When the data dump process is complete, the dashboard loads.
- When activating publication through **Email service for alarms** or **Schneider cloud services** for the first time, you may receive a large number of emails relating to old and existing alarms, especially in the case of long local history. This only occurs once when publication is activated.
- In firmware version 001.007.000, sampled measurements (for example, full-scale voltage phase of carrier input (dbV or dB)) are treated as aggregated data. As a result, an **Invalid request** message is displayed when viewing data in the **Trending** webpage. Update to firmware version 001.008.000 or greater to resolve the issue.
- In the **Trending** menu, some data may be proposed in the filter menu when not applicable. For example, **Breaker close count no reset** and **Breaker trip count** are displayed erroneously in the data filter menu for devices connected downstream to an I/O Smart Link gateway. Selecting such filters has no impact on the data displayed in trending graphs.

Limitations on Custom Device Models

- Incompatibility with certain legacy custom device models: If, after updating to a firmware version greater than 1.10, internal errors are displayed for a custom device model, the probable cause is an incompatibility with the legacy custom device model. The incompatibility means that you cannot delete the model or import a new version of it. Make a backup and contact the customer care center to resolve the issue without losing data.
- Units defined in custom measurement are not published to the Cloud.
- For wireless devices connected under a child gateway, if a custom model uses the same name as a predefined model, and devices are already associated with the predefined model, follow this procedure to load the custom model:
  1. Decommission any device already associated with the predefined model.
  2. Load the custom model in the Panel Server.
  3. Associate the devices with the newly loaded custom model.
  4. Publish the topology in case of use of the Panel Server with a Schneider Electric cloud application such EcoStruxure Asset Advisor or EcoStruxure Resource Advisor.

Limitations on Data Sampling, Data Logging and Alarming

- For certain wireless devices, **Over voltage** and **Undervoltage** alarms may be selected and not editable, even where the rated voltage value is not configured for that device.

  Workaround:

  1. Set a nominal rated voltage for those devices. The field becomes mandatory (indicated by red star).
  2. In the webpages at **Data management > Alarms**, **Over voltage** and **Undervoltage** alarms become editable and can be selected or deselected.
- After modifying the data sampling configuration of a device, the following Panel Server webpages are frozen and not available while the changes are being applied:
  - **Home** page
  - **Trending**
  - **Data management** pages
  - **Backup & restore**
  - **Custom models**
- When the user changes the sampling rate of a data measurement, the following behaviors may be observed:
  - 'NaN' or interpolated values might be inserted in the data logged in place of the existing value which indicates the data measurement is no longer correct nor reliable.
  - For Energy data or accumulated data:
    - in the data trends, non-linear trends may be created where linear trends are expected, due to data points where no historical data exists being duplicated from existing data points
    - a ‘Nan’ value might be replaced with a new value, resulting in non-linear trends
- The number of individual data points that can be sampled simultaneously is limited to 5,000 and limited to a flow of 500 data points per minute.
- The number of individual alarms that can be selected for publication is limited to 500. Among the 500 alarms, a maximum of 300 can be from Modbus-SL devices.

- In **Notifications** menu, alarms associated with deleted devices remain in the list with a blank device name field. This limitation occurs only if the customer has deleted devices for which an alarm was generated after updating to firmware version 001.008.000

Limitations on Specific Devices

Limitations on Acti9 Smartlink Modbus devices:

- For legacy Acti9 Smartlink Modbus devices, when Panel Server is unable to read the hardware version due to non-standard UTF-8 characters, a replacement character (�) is displayed at **Identification > Hardware revision** in the webpages. Previously the non-standard characters were not decoded and **No data** was displayed.

Limitations on SmartLink SIB devices:

- Legacy SmartLink SIB devices do not support measurements or alarms introduced after the replacement of SmartLink SIB devices with I/O Smart Link devices. These measurements and alarms are therefore not available in the parent gateway when a SmartLink SIB device is used as a child gateway.

Limitations on I/O Smart Link devices:

- When commissioning an I/O Smart Link (as a replacement for a legacy Acti9 Smartlink Modbus with firmware version 001.003.nnn) in EcoStruxure Power Commission software, leaving **None** in the **Signal Element** line causes an error when the device is commissioned in the Panel Server. The I/O Smart Link commissioning configuration cannot be saved in the Panel Server.
- I/O Smart Link devices support the following special characters:

ASCII	1	2	4	5	6	7	8	11	12	13	14	15	30	32	33	61	63	64	93	95
Character	space	!	#	$	%	&	‘	*	+	,	-	.	=	?	@	\	^	_	|	~

- Operating time, operation counter, and trip counter not available for **Wired devices** and **Standard I/O**.

Limitations on wireless devices:

- Within a parent-child Panel Server gateway configuration, the modification of a contextualized setting of a device to the child Panel Server (for example, auxiliary position modified from SD to SDE) is not automatically reflected in the parent gateway. A manual update in the parent Panel Server is required to display modifications.
- Wireless indication auxiliary: the Panel Server does not manage alarm notification by email or to Schneider Electric cloud applications.
- PowerTag Control:
  - If a PowerTag Control device is connected to a child gateway:
    - No automatic discovery.
    - No data is published to the parent gateway. To be able to publish at the parent gateway level, a custom model has to be developed for the parent gateway.
- PowerTag Display: not supported by Panel Server Advanced.

Limitations on MasterPacT NT/NW, ComPacT NS, and PowerPacT P/R frame circuit breakers. For details about which trip units and interfaces are supported, refer to:

- Modbus TCP/IP Devices Circuit Breakers and Associated Trip Units connected via IFE and eIFE interfaces, page 27
- Modbus Serial Devices Circuit Breakers and Associated Trip Units connected via IFM interface or BSCM Modbus SL/ULP module, page 30

NOTE: When manually adding a Modbus device, ensure that you select the correct device model from the Device list. The device model name includes information about the trip unit and connection interface or module.

Firmware Version 002.000.000

New Features for 002.000.000

- Increase in the maximum number of alarms that can be selected for publication from 100 to 500. Among the 500 alarms, a maximum of 300 can be from Modbus-SL devices.
- Addition of the following supported devices:
  - Wireless devices:
    - Exiway Light device
    - MasterPacT MTZ with MicroLogic Active AP or EP
  - Modbus devices: BSCM Modbus SL/ULP module
- Wi-Fi access point enables you to connect to the Wi-Fi network of the Panel Server from a smartphone running the Schneider Electric EcoStruxure Power Commission mobile app . From the app you can configure connected devices.
- Addition of local time zone which can be set at **Settings > General > Date and time**. When set, the local time zone is used:
  - For data displayed on the following webpages:
    - **Monitoring & Control**
    - **Home**
    - **Trending**
  - In emails for alarms
  - For data published to an SFTP or HTTPS server
  - For data exported in a local file

  UTC is used to publish to cloud applications and for logging data, even when local time zone is set.
- Addition of support for RSTP protocol allowing robust Ethernet ring topologies for critical applications. RSTP is available only when the Panel Server is configured in switched mode.
- Addition of the following supported measurements:
  - Steam volume (m^3)
  - Steam flow (m^3/s)
  - Steam mass flow (kg/s)
  - Air volume (m^3)
  - Air flow (m^3/s)

  These measurements are specified in a custom device model created in the EcoStruxure Power Commission web portal tool and imported into the Panel Server. The measurement values are available in the **Monitoring & Control** webpage.

- Panel Server webpage user experience improvements:
  - Loading time of webpages improved.
  - **Data management** page improvements:
    - In **Local export**, addition of the choice of a single device or **All devices** when the period selection is made.
    - A banner message gives information about the purpose and result of selecting measurements and alarms.
    - Date and time of last measurement data update is displayed at the top of the page.
  - In **Monitoring & Control** webpage, addition of date and time of last measurement data update at the top of the page.
  - In **Maintenance > Firmware update** page, addition of following sections:
    - **Retrieve the correct firmware** with button to click to allow you to download the correct firmware update for your Panel Server directly to your PC.
    - **Further information** with button to click to allow you to access general information related to Panel Server products.
  - **Home** page has improved loading time.
  - **Trending** page has the following improvements:
    - Granularity (display data by hour, day or month) added in compare function.
    - **Custom** period added in **Device view** and **Aggregated view**.
    - Editable start time of trending period added in addition to date.
    - Graphical indication (shading in bar charts, orange dot in line graphs) and tooltip added to indicate data points that are calculated by extrapolation or that data points may be missing due to modified sampling period.

Performance and Limitations for 002.000.000

General Performance and Limitations

- Web browser Mozilla Firefox not supported
- No manual addition of wireless devices connected to a child/downstream gateway by using EcoStruxure Power Commission software.
- Automatic discovery of wireless devices under a child gateway is limited to 128 devices because wireless devices are seen as Modbus TCP/IP devices.
- Typical Panel Server latency between Modbus TCP/IP request forwarded to the Modbus serial network is 10 ms.
- Some device identification data of the aggregated devices connected downstream from a Smartlink SI B or Smartlink SI D (such as I/O Smart Link or wireless devices) are displayed in the Panel Server webpage if the data is configured and commissioned from the Smartlink SI B or Smartlink SI D webpage.

- Keep firmware up to date in order to allow the Schneider Electric Customer Care Center to remotely access the Panel Server webpages.

  Remote access certificates for each firmware version are valid up to the dates indicated in the table.

Panel Server firmware version	Remote access certificate validity date
002.005.000	08 October 2026
002.004.000	10 August 2026
002.003.000	07 May 2026

  For more information about Firmware Update, refer to DOCA0172•• *EcoStruxure Panel Server - User Guide*, page 6.

Limitations on Publication

- The .csv publication to SFTP or HTTPS servers is limited to 200 files. If the publication does not contain all the data expected, follow one of these recommendations:
  - Reduce the publication period.
  - For each device, set the same sampling period for multiple measurements. All measurements with the same sampling period for a specific device are published in one .csv file.

  For more information, refer to section *File Format of Publications* in DOCA0172•• *EcoStruxure Panel Server - User Guide*, page 6.
- For legacy Smartlink devices and embedded input devices, configured as Pulse counter, when publication is to Schneider Electric cloud, non-standard units can be misinterpreted, and misleading values are published. To avoid this issue, in the webpages configure the pulse counter unit using standard (SI) units (for example, Wh) and use the pulse weight to convert to the desired unit (for example kWh). For more information, refer to the section *Pulse Digital Input Parameters* in DOCA0172•• *EcoStruxure Panel Server - User Guide*, page 6
- When exporting CSV files to SFTP or HTTPS servers, an excessively large volume of data can result in empty export files. Reduce the publication period and perform the export again.
- Limitation on SFTP publication - CSV file content not consistent over firmware releases:
  - When using the custom I/O contextualization of a Pulse counter device connected to the embedded input of the Panel Server, the format of the CSV files published through SFTP is not consistent with the format seen with firmware version 001.006.000. To see the data label **IoCountMeasurement** in your CSV scripts, enter *IoCountMeasurement* in the **Consumption meter element name** field on the Panel Server web pages at **Settings > Embedded input management**.
  - The above limitation and work-around also apply to a Pulse counter device connected downstream to the I/O Smart Link device.
- Limitations on topology publication to the Schneider Electric cloud: all the devices must be connected at least once to the Panel Server to enable the correct topology to be published to the Schneider Electric cloud.

Limitation on Parent/Child Gateway Configuration

- The parent Panel Server is unable to display and manage the measurements values of the digital inputs configured on the child Panel Server gateway. It is recommended to replace the child Panel Server with an I/O Smart Link device to enable the inputs and outputs of the channels configured in the I/O Smart Link to be correctly displayed in the Panel Server webpages and published to any associated Cloud application.

- In a configuration with Panel Server and PowerTag Link, for Energy devices connected downstream to a child PowerTag Link with parent Panel Server gateway, both **Active energy received** and **Active energy delivered** measurements are incorrectly displayed with No data value (NaN) in the Panel Server **Monitoring and Control** webpage. In addition, these measurements are not published to the upstream application.

  As a workaround, view the combined data **Active energy delivered + received**, which is correctly displayed with accurate values in the **Monitoring and Control**, **Home**, and **Trending** webpages and published to the upstream application.

  NOTE: In EcoStruxure Energy Hub (EEH) the combined data **Active energy delivered + received** is not displayed.

Limitations on Trending and Home Menus:

- During a data dump, in some cases the dashboard does not load due to a timeout. When the data dump process is complete, the dashboard loads.
- When activating publication through **Email service for alarms** or **Schneider cloud services** for the first time, you may receive a large number of emails relating to old and existing alarms, especially in the case of long local history. This only occurs once when publication is activated.
- In firmware version 001.007.000, sampled measurements (for example, full-scale voltage phase of carrier input (dbV or dB)) are treated as aggregated data. As a result, an **Invalid request** message is displayed when viewing data in the **Trending** webpage. Update to firmware version 001.008.000 or greater to resolve the issue.
- In the **Trending** menu, some data may be proposed in the filter menu when not applicable. For example, **Breaker close count no reset** and **Breaker trip count** are displayed erroneously in the data filter menu for devices connected downstream to an I/O Smart Link gateway. Selecting such filters has no impact on the data displayed in trending graphs.

Limitations on Custom Device Models

- Units defined in custom measurement are not published to the Cloud.
- For wireless devices connected under a child gateway, if a custom model uses the same name as a predefined model, and devices are already associated with the predefined model, follow this procedure to load the custom model:
  1. Decommission any device already associated with the predefined model.
  2. Load the custom model in the Panel Server.
  3. Associate the devices with the newly loaded custom model.
  4. Publish the topology in case of use of the Panel Server with a Schneider Electric cloud application such EcoStruxure Asset Advisor or EcoStruxure Resource Advisor.

Limitations on Data Sampling, Data Logging and Alarming

- Erroneous **Loss of communication** alarms may be displayed briefly during Panel Server start up after a power cycle. The erroneous alarms disappear after a few seconds. If the alarms are selected for publishing, the appearance and disappearance are historized. There is no impact on other alarms.

- For certain wireless devices, **Over voltage** and **Undervoltage** alarms may be selected and not editable, even where the rated voltage value is not configured for that device.

  Workaround:

  1. Set a nominal rated voltage for those devices. The field becomes mandatory (indicated by red star).
  2. In the webpages at **Data management > Alarms**, **Over voltage** and **Undervoltage** alarms become editable and can be selected or deselected.
- After modifying the data sampling configuration of a device, the following Panel Server webpages are frozen and not available while the changes are being applied:
  - **Home** page
  - **Trending**
  - **Data management** pages
  - **Backup & restore**
  - **Custom models**
- When the user changes the sampling rate of a data measurement, the following behaviors may be observed:
  - 'NaN' or interpolated values might be inserted in the data logged in place of the existing value which indicates the data measurement is no longer correct nor reliable.
  - For Energy data or accumulated data:
    - in the data trends, non-linear trends may be created where linear trends are expected, due to data points where no historical data exists being duplicated from existing data points
    - a ‘Nan’ value might be replaced with a new value, resulting in non-linear trends
- The number of individual data points that can be sampled simultaneously is limited to 5,000 and limited to a flow of 500 data points per minute.
- The number of individual alarms that can be selected for publication is limited to 500. Among the 500 alarms, a maximum of 300 can be from Modbus-SL devices.
- In **Notifications** menu, alarms associated with deleted devices remain in the list with a blank device name field. This limitation occurs only if the customer has deleted devices for which an alarm was generated after updating to firmware version 001.008.000

Limitations on Specific Devices

Limitations on Acti9 Smartlink Modbus devices:

- For legacy Acti9 Smartlink Modbus devices, when Panel Server is unable to read the hardware version due to non-standard UTF-8 characters, a replacement character (�) is displayed at **Identification > Hardware revision** in the webpages. Previously the non-standard characters were not decoded and **No data** was displayed.

Limitations on I/O Smart Link devices:

- When commissioning an I/O Smart Link (as a replacement for a legacy Acti9 Smartlink Modbus with firmware version 001.003.nnn) in EcoStruxure Power Commission software, leaving **None** in the **Signal Element** line causes an error when the device is commissioned in the Panel Server. The I/O Smart Link commissioning configuration cannot be saved in the Panel Server.
- I/O Smart Link devices support the following special characters:

ASCII	1	2	4	5	6	7	8	11	12	13	14	15	30	32	33	61	63	64	93	95
Character	space	!	#	$	%	&	‘	*	+	,	-	.	=	?	@	\	^	_	|	~

- Operating time, operation counter, and trip counter not available for **Wired devices** and **Standard I/O**.

Limitations on wireless devices:

- Within a parent-child Panel Server gateway configuration, the modification of a contextualized setting of a device to the child Panel Server (for example, auxiliary position modified from SD to SDE) is not automatically reflected in the parent gateway. A manual update in the parent Panel Server is required to display modifications.
- Wireless indication auxiliary: the Panel Server does not manage alarm notification by email or to Schneider Electric cloud applications.
- PowerTag Control:
  - If a PowerTag Control device is connected to a child gateway:
    - No automatic discovery.
    - No data is published to the parent gateway. To be able to publish at the parent gateway level, a custom model has to be developed for the parent gateway.
- PowerTag Display: not supported by Panel Server Advanced.

Limitations on MasterPacT NT/NW, ComPacT NS, and PowerPacT P/R frame circuit breakers. For details about which trip units and interfaces are supported, refer to:

- Modbus TCP/IP Devices Circuit Breakers and Associated Trip Units connected via IFE and eIFE interfaces, page 27
- Modbus Serial Devices Circuit Breakers and Associated Trip Units connected via IFM interface or BSCM Modbus SL/ULP module, page 30

  NOTE: When manually adding a Modbus device, ensure that you select the correct device model from the Device list. The device model name includes information about the trip unit and connection interface or module.

Firmware Version 001.010.000

New Features

- Data publication through HTTPS, with public certificate authority.
- Security improvement for Panel Server claiming from EcoStruxure Energy Hub: Claiming procedure uses device code in addition to serial number of Panel Server. The device code is available with the serial number:
  - By flashing the QR code on the front face of the Panel Server
  - on the Panel Server webpages with Panel Server identification data
- For PowerTag C I/O devices, send a schedule for output control from cloud. Once received and running, the function allows the Panel Server to remotely execute scheduled control orders, even if the connection to cloud is interrupted.
- Improvement in management of remote configurations sent from a cloud application: For invalid configurations, an error is logged in the auto-diagnostic file and feedback is sent to the cloud application to improve troubleshooting.
- After publishing a topology to the Schneider Electric cloud and receiving the associated remote configuration, the Panel Server displays the following information at **Settings > Data publication > Topology**:
  - Last remote configuration status
  - Last successful remote configuration date
- For PowerTag devices, addition of reset of energy counters from **Energy** widget in **Monitoring & Control** page, with confirmation popup message.
- New measurements added for applicable wireless devices:
  - Active power demand
  - Peak active power demand with date and time of occurrence
  - Reset of peak active power demand
    - per device on the device page at **Monitoring & Control**
    - for all associated devices at **Settings > Wireless devices > Measurements management**
- Demand calculation time interval can be set at **Settings > Wireless devices > Measurements management**
- Addition of supported device Power meter iEM2455
- Custom models improvement: Supports logic code SMOD10K for data measurement in custom device model created from EcoStruxure Power Commission software and imported into the Panel Server
- Panel Server webpage user experience improvements
  - Energy units displayed more consistently in **Trending** page.
  - Selected filters in **Trending** page are maintained when changing screens or device selection.
  - The same color code is used for alarms across different webpages
  - In the **Monitoring & Control** page, only measurements relevant to the selected device are displayed in **Advanced data** tab, to improve readability
  - In the **Maintenance** page, the Panel Server serial number is displayed when Schneider Electric Customer Care Center is authorized to access the Panel Server remotely.
  - Triangular ‘No data’ icon replaced with standard warning icon.
- Diagnostic logs improved for better debugging experience

Performance and Limitations

General Performance and Limitations

- Web browser Mozilla Firefox not supported
- No manual addition of wireless devices connected to a child/downstream gateway by using EcoStruxure Power Commission software.
- Automatic discovery of wireless devices under a child gateway is limited to 128 devices because wireless devices are seen as Modbus TCP/IP devices.
- Typical Panel Server latency between Modbus TCP/IP request forwarded to the Modbus serial network is 10 ms.
- Wi-Fi function available through a connection to a Wi-Fi infrastructure only. Access point function not available.
- Some device identification data of the aggregated devices connected downstream from a Smartlink SI B or Smartlink SI D (such as I/O Smart Link or wireless devices) are displayed in the Panel Server webpage if the data is configured and commissioned from the Smartlink SI B or Smartlink SI D webpage.
- Keep firmware up to date in order to allow the Schneider Electric Customer Care Center to remotely access the Panel Server webpages. Remote access certificate validity is as follows:
  - Panel Server Firmware version 001.008.000: certificate valid until 23 July 2024
  - Panel Server Firmware version 001.009.000: certificate valid until 16 October 2024
  - Panel Server Firmware version 001.010.000: certificate valid until 20 January 2025

  For more information about Firmware Update, refer to DOCA0172•• *EcoStruxure Panel Server - User Guide*, page 6.

Limitations on Publication

- When exporting CSV files to SFTP or HTTPS servers, an excessively large volume of data can result in empty export files. Reduce the publication period and perform the export again.
- Limitation on SFTP publication - CSV file content not consistent over firmware releases:
  - When using the custom I/O contextualization of a Pulse counter device connected to the embedded input of the Panel Server, the format of the CSV files published through SFTP is not consistent with the format seen with firmware version 001.006.000. To see the data label **IoCountMeasurement** in your CSV scripts, enter *IoCountMeasurement* in the **Consumption meter element name** field on the Panel Server web pages at **Settings > Embedded input management**.
  - The above limitation and work-around also apply to a Pulse counter device connected downstream to the I/O Smart Link device.
- Limitations on topology publication to the Schneider Electric cloud: all the devices must be connected at least once to the Panel Server to enable the correct topology to be published to the Schneider Electric cloud.

Limitation on Parent/Child Gateway Configuration

- The parent Panel Server is unable to display and manage the measurements values of the digital inputs configured on the child Panel Server gateway. It is recommended to replace the child Panel Server with an I/O Smart Link device to enable the inputs and outputs of the channels configured in the I/O Smart Link to be correctly displayed in the Panel Server webpages and published to any associated Cloud application.
- In a configuration with Panel Server and PowerTag Link, for Energy devices connected downstream to a child PowerTag Link with parent Panel Server gateway, both **Active energy received** and **Active energy delivered** measurements are incorrectly displayed with No data value (NaN) in the Panel Server **Monitoring and Control** webpage. In addition, these measurements are not published to the upstream application.

  As a workaround, view the combined data **Active energy delivered + received**, which is correctly displayed with accurate values in the **Monitoring and Control**, **Home**, and **Trending** webpages and published to the upstream application.

  NOTE: In EcoStruxure Energy Hub (EEH) the combined data **Active energy delivered + received** is not displayed.

Limitations on Trending and Home Menus:

- During a data dump, in some cases the dashboard does not load due to a timeout. When the data dump process is complete, the dashboard loads.
- When activating publication through **Email service for alarms** or **Schneider cloud services** for the first time, you may receive a large number of emails relating to old and existing alarms, especially in the case of long local history. This only occurs once when publication is activated.
- In firmware version 001.007.000, sampled measurements (for example, full-scale voltage phase of carrier input (dbV or dB)) are treated as aggregated data. As a result, an **Invalid request** message is displayed when viewing data in the **Trending** webpage. Update to firmware version 001.008.000 or greater to resolve the issue.
- In the **Trending** menu, some data may be proposed in the filter menu when not applicable. For example, **Breaker close count no reset** and **Breaker trip count** are displayed erroneously in the data filter menu for devices connected downstream to an I/O Smart Link gateway. Selecting such filters has no impact on the data displayed in trending graphs.

Limitations on Custom Device Models

- Units defined in custom measurement are not published to the Cloud.
- For wireless devices connected under a child gateway, if a custom model uses the same name as a predefined model, and devices are already associated with the predefined model, follow this procedure to load the custom model:

  1. Decommission any device already associated with the predefined model.
  2. Load the custom model in the Panel Server.
  3. Associate the devices with the newly loaded custom model.
  4. Publish the topology in case of use of the Panel Server with a Schneider Electric cloud application such EcoStruxure Asset Advisor or EcoStruxure Resource Advisor.

Limitations on Data Sampling, Data Logging and Alarming

- After modifying the data sampling configuration of a device, the following Panel Server webpages are frozen and not available while the changes are being applied:
  - **Home** page
  - **Trending**
  - **Data management** pages
  - **Backup & restore**
  - **Custom models**
- When the user changes the sampling rate of a data measurement, the following behaviors may be observed:
  - 'NaN' or interpolated values might be inserted in the data logged in place of the existing value which indicates the data measurement is no longer correct nor reliable.
  - For Energy data or accumulated data:
    - in the data trends, non-linear trends may be created where linear trends are expected, due to data points where no historical data exists being duplicated from existing data points
    - a ‘Nan’ value might be replaced with a new value, resulting in non-linear trends
- The number of individual data points that can be sampled simultaneously is limited to 5 000 and limited to a flow of 500 data points per minute.
- The number of individual alarms that can be configured for monitoring and sending an email notification is limited to 100.
- In **Notifications** menu, alarms associated with deleted devices remain in the list with a blank device name field. This limitation occurs only if the customer has deleted devices for which an alarm was generated after updating to firmware version 001.008.000

Limitations on Specific Devices

Limitations on I/O Smart Link:

- When commissioning an I/O Smart Link (as a replacement for a legacy Acti9 Smartlink Modbus with FW1.3.x) in EcoStruxure Power Commission software, leaving **None** in the **Signal Element** line causes an error when the device is commissioned in the Panel Server. The I/O Smart Link commissioning configuration cannot be saved in the Panel Server.
- I/O Smart Link devices support the following special characters:

ASCII	1	2	4	5	6	7	8	11	12	13	14	15	30	32	33	61	63	64	93	95
Character	space	!	#	$	%	&	‘	*	+	,	-	.	=	?	@	\	^	_	|	~

- Operating time, operation counter, and trip counter not available for **Wired devices** and **Standard I/O**.

Limitations on Modbus Serial devices:

Limitations on wireless devices:

- Within a parent-child Panel Server gateway configuration, the modification of a contextualized setting of a device to the child Panel Server (for example, auxiliary position modified from SD to SDE) is not automatically reflected in the parent gateway. A manual update in the parent Panel Server is required to display modifications.
- Wireless indication auxiliary: the Panel Server does not manage alarm notification by email or to Schneider Electric cloud applications.

- PowerTag Control:
  - If a PowerTag Control device is connected to a child gateway:
    - No automatic discovery.
    - No data is published to the parent gateway. To be able to publish at the parent gateway level, a custom model has to be developed for the parent gateway.
- PowerTag Display: not supported by Panel Server Advanced.

Limitations on MasterPact NT/NW, ComPacT NS, and PowerPacT P/R frame circuit breakers. For details about which trip units and interfaces are supported, refer to

- Modbus TCP/IP Devices Circuit Breakers and Associated Trip Units connected via IFE and eIFE interfaces, page 27
- Modbus Serial Devices Circuit Breakers and Associated Trip Units connected via IFM interface, page 30

Firmware Version 001.009.000

New Features

- When data publication is activated by any method, three years of historized data is retained on the Panel Server. The last three months of historized data are published by the method selected.
- When the sampling period (frequency) is changed locally or by a remote configuration, historical logged data points are retained and migrated to comply with the new sampling period, with the following results:
  - Reducing the frequency (for example, changing the period from 5 minutes to 10 minutes): The data points relevant to the reduced frequency are retained. Intermediate data points are deleted.
  - Increasing the frequency (for example, changing the period from 10 minutes to 5 minutes): Data points for which no historical data exists are duplicated from existing historical data (data points on either side), which may create non-linear trends where linear trends are expected.
- Custom models management improvement: you can update an existing custom model to a new version, and propagate the changes to the associated devices without deleting and rediscovering the associated devices.

  For more information about importing custom model updates, refer to DOCA0172EN *EcoStruxure Panel Server - User Guide*.
- Number of concurrent supported devices increased to 85 for certain devices. For more information, refer to General Features.
- The communication period of a wireless device can be set either at the family device level (for example, for all sensors) or individually, device by device to provide better granularity. For Energy-related wireless devices, it is possible to individually set 2 seconds as the communication period.
- Output control from cloud: this function allows you to manage remote output control orders from a cloud application to a PowerTag Control IO device paired to the Panel Server. You can enable or disable the function in the Panel Server webpages.
- Modbus Serial settings are available for Modbus registers via Modbus address 255. The following parameters can be consulted:
  - Modbus address: fixed at 255
  - Parity
  - Baud rate
  - Number of stop bits

  For more information, refer to DOCA0241EN *EcoStruxure Panel Server - Modbus File*
- Improvement in handling of incorrect remote configuration. On reception, the remote configuration is pre-parsed and errors are stored in the logs.

  If the Panel Server cannot execute the incorrect configuration, the Panel Server stops data publication to allow the cloud application to check the logs and retrieve the details. The cloud service icon is orange.
- Modbus registers read improvements:
  - Read content of registers of Modbus TCP/IP devices connected downstream from the Panel Server
  - Additional read function code FC01 Read coils status
  - Other formats than hexadecimal are available.

- Panel Server webpage user experience improvements:
  - In the **Monitoring & Control** pages, the following improvements are available:
    - In the **Advanced data** page, after automatic refresh, the table display maintains current view instead of reverting to top of table.
    - In the **Advanced data** page, active energy data is displayed in the first data columns for improved visibility.
    - Column sorting is available by clicking the icon in the header row of each column:

       Data in column can be sorted

       Data in column is sorted in descending alphabetical or numerical order

       Data in column is sorted in ascending alphabetical or numerical order
  - In **Maintenance > Device communication** status information is available for Input/Output of a wireless PowerTag Control device.
  - In all pages where settings can be changed, the exit popup message offers the choice of continuing with or without saving setting changes.
  - Energy units displayed more consistently:
    - In **Home** page, Active energy is displayed in KWh, with no decimals.
    - In **Monitoring & Control** overview page and on the widgets page (available by clicking on a device):
      - Active energy is displayed in KWh, with no decimals.
      - Apparent energy is displayed in KVah, with no decimals.
      - Reactive energy is displayed in KVarh, with no decimals.
  - Improvement in screen display: when clicking away from a pre-selected device view, the view is maintained on returning to that screen.

Performance and Limitations

General Performance and Limitations

- Web browser Mozilla Firefox not supported
- No manual addition of wireless devices connected to a child/downstream gateway by using EcoStruxure Power Commission software.
- Automatic discovery of wireless devices under a child gateway is limited to 128 devices because wireless devices are seen as Modbus TCP/IP devices.
- Typical Panel Server latency between Modbus TCP/IP request forwarded to the Modbus serial network is 10 ms.
- Wi-Fi function available through a connection to a Wi-Fi infrastructure only. Access point function not available.
- Some device identification data of the aggregated devices connected downstream from a Smartlink SI B or Smartlink SI D (such as I/O Smart Link or wireless devices) are displayed in the Panel Server webpage if the data is configured and commissioned from the Smartlink SI B or Smartlink SI D webpage.

- Keep firmware up to date in order to allow the Schneider Electric Customer Care Center to remotely access the Panel Server webpages. Remote access certificate validity is as follows:
  - Panel Server Firmware version 001.007.000: certificate valid until 5 May 2024.
  - Panel Server Firmware version 001.008.000: certificate valid until 23 July 2024
  - Panel Server Firmware version 001.009.000: certificate valid until 16 October 2024

  For more information about Firmware Update, refer to DOCA0172EN *EcoStruxure Panel Server - User Guide*.

Limitations on Publication

- Limitation on SFTP publication - CSV file content not consistent over firmware releases:
  - When using the custom I/O contextualization of a Pulse counter device connected to the embedded input of the Panel Server, the format of the CSV files published through SFTP is not consistent with the format seen with firmware version 001.006.000. To see the data label **IoCountMeasurement** in your CSV scripts, enter *IoCountMeasurement* in the **Consumption meter element name** field on the Panel Server web pages at **Settings > Embedded input management**.
  - The above limitation and work-around also apply to a Pulse counter device connected downstream to the I/O Smart Link device.
- Limitations on topology publication to the Schneider Electric cloud: all the devices must be connected at least once to the Panel Server to enable the correct topology to be published to the Schneider Electric cloud.

Limitation on Parent/Child Gateway Configuration

Limitation on parent/child gateway configuration: In a configuration with Panel Server and PowerTag Link, for Energy devices connected downstream to a child PowerTag Link with parent Panel Server gateway, both **Active energy received** and **Active energy delivered** measurements are incorrectly displayed with No data value (NaN) in the Panel Server **Monitoring and Control** webpage. In addition, these measurements are not published to the upstream application.

As a workaround, view the combined data **Active energy delivered + received**, which is correctly displayed with accurate values in the **Monitoring and Control**, **Home**, and **Trending** webpages and published to the upstream application.

NOTE: In EcoStruxure Energy Hub (EEH) the combined data **Active energy delivered + received** is not displayed.

Limitations on Trending and Home Menus:

- During a data dump, in some cases the dashboard does not load due to a timeout. When the data dump process is complete, the dashboard loads.
- When activating publication through **Email service for alarms** or **Schneider cloud services** for the first time, you may receive a large number of emails relating to old and existing alarms, especially in the case of long local history. This only occurs once when publication is activated.
- In firmware version 001.007.000, sampled measurements (for example, full-scale voltage phase of carrier input (dbV or dB)) are treated as aggregated data. As a result, an **Invalid request** message is displayed when viewing data in the **Trending** webpage. Update to firmware version 001.008.000 or greater to resolve the issue.

- In the **Trending** menu, some data may be proposed in the filter menu when not applicable. For example, **Breaker close count no reset** and **Breaker trip count** are displayed erroneously in the data filter menu for devices connected downstream to an I/O Smart Link gateway. Selecting such filters has no impact on the data displayed in trending graphs.

Limitations on Custom Device Models

- Units defined in custom measurement are not published to the Cloud.
- For wireless devices connected under a child gateway, if a custom model uses the same name as a predefined model, and devices are already associated with the predefined model, follow this procedure to load the custom model:
  1. Decommission any device already associated with the predefined model.
  2. Load the custom model in the Panel Server.
  3. Reboot the Panel Server.
  4. Associate the devices with the newly loaded custom model.
  5. Publish the topology in case of use of the Panel Server with a Schneider Electric cloud application such EcoStruxure Asset Advisor or EcoStruxure Resource Advisor.

Limitations on Data Sampling, Data Logging and Alarming

- After modifying the data sampling configuration of a device, the following Panel Server webpages are frozen and not available while the changes are being applied:
  - **Home** page
  - **Trending**
  - **Data management** pages
  - **Backup & restore**
  - **Custom models**
- When the user increases the sampling rate of a data measurement, the following behaviors may be observed:
  - a 'NaN' value might be inserted in the data logged in place of the existing value which indicates the data measurement is no longer correct nor reliable.
  - For Energy data or accumulated data:
    - in the data trends, non-linear trends may be created where linear trends are expected, due to data points where no historical data exists being duplicated from existing data points
    - a ‘Nan’ value might be replaced with a new value, resulting in non-linear trends
- The number of individual data points that can be sampled simultaneously is limited to 5 000 and limited to a flow of 500 data points per minute.
- The number of individual alarms that can be configured for monitoring and sending an email notification is limited to 100.
- In **Notifications** menu, alarms associated with deleted devices remain in the list with a blank device name field. This limitation occurs only if the customer has deleted devices for which an alarm was generated after updating to firmware version 001.008.000

Limitations on Specific Devices

Limitations on I/O Smart Link:

- When commissioning an I/O Smart Link (as a replacement for a legacy Acti9 Smartlink Modbus with FW1.3.x) in EcoStruxure Power Commission software, leaving **None** in the **Signal Element** line causes an error when the device is commissioned in the Panel Server. The I/O Smart Link commissioning configuration cannot be saved in the Panel Server.
- Operating time, operation counter, and trip counter not available for **Wired devices** and **Standard I/O**.

Limitations on wireless devices:

- Within a parent-child Panel Server gateway configuration, the modification of a contextualized setting of a device to the child Panel Server (for example, auxiliary position modified from SD to SDE) is not automatically reflected in the parent gateway. A manual update in the parent Panel Server is required to display modifications.
- Wireless indication auxiliary: the Panel Server does not manage alarm notification by email or to Schneider Electric cloud applications.
- PowerTag Control:
  - If a PowerTag Control device is connected to a child gateway:
    - No automatic discovery.
    - No data is published to the parent gateway. To be able to publish at the parent gateway level, a custom model has to be developed for the parent gateway.
- PowerTag Display: not supported by Panel Server Advanced.

Limitations on MasterPact NT/NW, ComPacT NS, and PowerPacT P/R frame circuit breakers. For details about which trip units and interfaces are supported, refer to

- Modbus TCP/IP Devices Circuit Breakers and Associated Trip Units connected via IFE and eIFE interfaces, page 27
- Modbus Serial Devices Circuit Breakers and Associated Trip Units connected via IFM interface, page 30

Firmware Version 001.008.000

New Features

- New **Notifications** page provides journal of alarms, for display only.
- New functionalities provided in the **Trending** menu
  - Comparison mode is available in **Aggregated view** in addition to **Device view**.
  - Comparison mode supports comparison of integrated data (for example, active energy)
- Improvement of commissioning of Modbus devices to enable reading of Modbus-SL device registers through webpages
- For devices connected downstream to an I/O Smart Link device:
  - Addition of the contextualization of the signal element for standard I/O devices
  - Support of predefined values in the contextualization of pulse counter devices
- **Modbus devices** webpage: additionally displays name and version of custom model used
- Improvement in commissioning of wireless PowerTag Energy devices
- Custom device model: supports units defined in custom measurement in Panel Server webpages (for example, **Modbus devices**, **Trending** menu, **Monitoring and Control** menu)

  NOTE: Units are not published to the Cloud.
- Wireless PowerTag Control devices:
  - Full integration of following devices:
    - PowerTag C IO 230V digital input output module (A9XMC1D3)
    - PowerTag C 2DI 230V digital input module (A9XMC2D3)
  - Support of contactor with feedback loop configuration
  - Support of impulse relay configuration
  - Enable/disable local control from webpages
- Data sampling: popup message is displayed in the webpages when number of sampled data of paired Modbus or wireless devices is close to 90% of or exceeds the system sampling limit. Recommended action is provided.
  - For wireless devices: in the **Wireless devices > Wireless discovery** webpage
  - For Modbus devices in the **Modbus addition** webpage
- Webpage user experience improved:
  - **Trending** menu
    - Same default periods in **Trending** and **Home** menus
    - Start time in a period is preserved when compare mode is activated or disabled
    - Curves or barcharts are displayed with background grid for better readability
    - Use buttons to select or deselect a curve or barchart in a graph
    - Direct access via icon to **Trending** - **Aggregated view** page from **Home** page
  - **Monitoring and Control** menu: all digits of energy data values are displayed (scientific notation no longer used)

Performance and Limitations

- Limitation on SFTP publication - CSV file content not consistent over firmware releases:
  - When using the custom I/O contexualization of a Pulse counter device connected to the embedded input of the Panel Server, the format of the CSV files published through SFTP is not consistent with the format seen with firmware version 001.006.000. To see the data label **IoCountMeasurement** in your CSV scripts, enter *IoCountMeasurement* in the **Consumption meter element name** field on the Panel Server web pages at **Settings > Embedded input management**.
  - The above limitation and work-around also apply to a Pulse counter device connected downstream to the I/O Smart Link device.
- Limitation on parent/child gateway configuration: In a configuration with Panel Server and PowerTag Link, for Energy devices connected downstream to a child PowerTag Link with parent Panel Server gateway, both **Active energy received** and **Active energy delivered** measurements are incorrectly displayed with No data value (NaN) in the Panel Server **Monitoring and Control** webpage. In addition, these measurements are not published to the upstream application.

  As a workaround, view the combined data **Active energy delivered + received**, which is correctly displayed with accurate values in the **Monitoring and Control**, **Home**, and **Trending** webpages and published to the upstream application.

  NOTE: In EcoStruxure Energy Hub (EEH) the combined data **Active energy delivered + received** is not displayed.
- Limitations on **Trending** and **Home** menus:
  - During a data dump, in some cases the dashboard does not load due to a timeout. When the data dump process is complete, the dashboard loads.
  - When activating publication through **Email service for alarms** or **Schneider cloud services** for the first time, you may receive a large number of emails relating to old and existing alarms, especially in the case of long local history. This only occurs once when publication is activated.
  - In firmware version 001.007.000, sampled measurements (for example, full-scale voltage phase of carrier input (dbV or dB)) are treated as aggregated data. As a result, an **Invalid request** message is displayed when viewing data in the **Trending** webpage. Update to firmware version 001.008.000 or greater to resolve the issue.
  - In the **Trending** menu, some data may be proposed in the filter menu when not applicable. For example, **Breaker close count reset** and **Breaker trip count** are displayed erroneously in the data filter menu for devices connected downstream to an I/O Smart Link gateway. Selecting such filters has no impact on the data displayed in trending graphs.
- Custom device model: units defined in custom measurement are not published to the Cloud.
- Web browser Mozilla Firefox not supported
- General performance and limitations:
  - No manual addition of wireless devices connected to a child/downstream gateway by using EcoStruxure Power Commission software.
  - Automatic discovery of wireless devices under a child gateway is limited to 128 devices because wireless devices are seen as Modbus TCP/IP devices.
  - Typical Panel Server latency between Modbus TCP/IP request forwarded to the Modbus serial network is 10 ms.
  - Wi-Fi function available through a connection to a Wi-Fi infrastructure only. Access point function not available.
  - Some device identification data of the aggregated devices connected downstream from a Smartlink SI B or Smartlink SI D (such as I/O Smart Link or wireless devices) are displayed in the Panel Server

webpage if the data is configured and commissioned from the Smartlink SI B or Smartlink SI D webpage.

- Keep firmware up to date in order to allow the Schneider Electric Customer Care Center to remotely access the Panel Server webpages. Remote access certificate validity is as follows:
  - Panel Server Firmware version 001.006.000: certificate valid until 28 January 2024.
  - Panel Server Firmware version 001.007.000: certificate valid until 5 May 2024.
  - Panel Server Firmware version 001.008.000: certificate valid until 23 July 2024

  For more information about Firmware Update, refer to DOCA0172EN *EcoStruxure Panel Server - User Guide*.

- Limitations on logging and alarming:
  - The number of individual data points that can be sampled is limited to 5 000 and limited to a flow of 500 data points per minute.
  - The number of individual alarms that can be configured for monitoring and sending an email notification is limited to 100.
- Limitations on I/O Smart Link:
  - Operating time, operation counter, and trip counter not available for **Wired devices** and **Standard I/O**.
- Limitations on wireless devices:
  - Within a parent-child Panel Server gateway configuration, the modification of a contextualized setting of a device to the child Panel Server (for example, auxiliary position modified from SD to SDE) is not automatically reflected in the parent gateway. A manual update in the parent Panel Server is required to display modifications.
  - Wireless indication auxiliary: the Panel Server does not manage alarm notification by email or to Schneider Electric cloud applications.
  - PowerTag Control:
    - If a PowerTag Control device is connected to a child gateway:
      - ◊ No automatic discovery.
      - ◊ No data is published to the parent gateway. To be able to publish at the parent gateway level, a custom model has to be developed for the parent gateway.
    - Pairing process to be followed:
      1. Pair the PowerTag Control devices if any in the configuration (all the other wireless devices must be unpowered).
      2. Pair the PowerLogic HeatTag sensors if any in the configuration.
      3. Pair PowerLogic PD100 if any in the configuration.
      4. Pair the other wireless devices.
  - PowerTag Display: not supported by Panel Server Advanced.
- Limitations on MasterPact NT/NW, ComPacT NS, and PowerPact P/R frame circuit breakers
  - MicroLogic 2.0 E. is not supported
  - MicroLogic 7.0 E is partially supported.
  - MicroLogic 5.0 E and 6.0 E are supported.
  - All MicroLogic A, P and H are supported
  - Panel Server does not support multiple Modbus/TCP connections to MicroLogic command interface when the MicroLogic is connected under an IFM interface.
- Limitations on topology publication to the Schneider Electric cloud: all the devices must be connected at least once to the Panel Server to enable the correct topology to be published to the Schneider Electric cloud.

- Limitations on custom model for wireless devices connected under a child gateway: if a custom model uses the same name as a predefined model and devices are already associated with the predefined model, follow this procedure to load the custom model:
  1. Decommission any device already associated with the predefined model.
  2. Load the custom model in the Panel Server.
  3. Reboot the Panel Server.
  4. Associate the devices with the newly loaded custom model.
  5. Publish the topology in case of use of the Panel Server with a Schneider Electric cloud application such EcoStruxure Asset Advisor or EcoStruxure Resource Advisor.

Firmware Version 001.007.000

New Features

- Enhancement of number of supported Modbus/TCP devices from 64 to 128
- New **Home** page provides overview of energy consumption, aggregated by usage, at a glance.
- Trending
  - Improvement in **Device view** page:
    - Basic trending view (no comparison) available with several devices and several integrated data types (for example, active energy) selected.
    - Comparison mode available with several devices and one or more continuous data types selected.
    - Trending graphs refreshed on a selectable time interval (H/D/M).

      NOTE: It is not possible to compare different periods.
  - New **Aggregated view** page provides a barchart of aggregated data by commodity (for example, electricity) and usage over a specified period of time.
- Data publication: Enable both data publication to SFTP server, and email notifications for alarms.
- Data log export: Export logged data of one single device as .csv file.
- Improved support of wireless indication auxiliary (LV429453, LV429454) through Panel Server webpages:
  - Contextualization
  - Accurate monitoring
- Addition of support for wired device **Breaker I/O**, connected downstream to I/O Smart Link device.
- Automatic discovery in the parent gateway of the wireless indication auxiliary devices connected to the child gateway.

  NOTE: To benefit from this feature, on the parent Panel Server, delete the current child configuration before updating to firmware version 001.007.000 or greater. Then select **Discover** to automatically discover the wireless indication auxiliary devices connected to the child gateway. Check that the child Panel Server gateway is also updated to firmware version 001.007.000 or greater.
- Custom device model: version of imported custom model displayed in custom models table.
- Webpages improved:
  - Direct access via icon to **Trending** view from device page
  - Responsive display of **General** pages
  - Addition of warning messages and tool-tips

General Features

The following table presents the availability of general features on Panel Server Advanced in firmware version 001.007.000.

● Available

● Not available

General features			**Availability**
Functionality	Separated network topology		●
	Switched network topology		●
	Connection to Edge Control (EcoStruxure Power Monitoring Expert, EcoStruxure Power Operation,EcoStruxure Building Operation, any Building Management System, or third-party monitoring or supervision system)		●
	Ability to disable concurrently and permanently the wireless networks (Wi-Fi and IEEE 802.15.4) by using Panel Server webpages		●
Wi-Fi	2.4 GHz		●
	5 GHz		●
	External Wi-Fi antenna (reference: PASA-ANT1)		●
IEEE 802.15.4 communication	**Wireless device**	**Maximum concurrent number of devices**	●
	PowerTag Energy sensors	40	
	PowerLogic Tag energy sensors	40	
	Acti9 Active devices	40	
	Wireless indication auxiliaries	40	
	ComPacT circuit breakers	40	
	PowerPacT circuit breakers	40	
	Wireless CO_2 sensors	40	
	Wireless temperature and humidity sensors	40	
	PowerTag A devices	40	
	PowerTag Ambient sensors	40	
	Easergy TH110/CL110 environmental sensors	85	
	PowerLogic HeatTag sensors	15	
	PowerTag Control devices	10	
	PowerLogic PD100 devices	15	
	Constraints within a mixed configuration: • Any combination of wireless devices listed in the table above must not exceed **40 devices**. • The total number of PowerTag Control, PowerLogic HeatTag, and PowerLogic PD100 should not exceed **20 devices**.		
Modbus TCP/IP communication	128 Modbus TCP/IP devices maximum including devices physically connected to the Panel Server and virtual devices (that is, IEEE 802.15.4 devices connected to a child Panel Server gateway)		●
Human Machine Interface (HMI)	FDM128 Ethernet display		●
	PowerTag Link display		●
Configuration	User management by single user account		●
	User management by multiple users with Role-Based Access Control (RBAC)		●
Alarms	• In general, publication of alarms supported by the end devices. • Publication of alarms related to the following: ◦ Communication issue between a device and Panel Server when available from the end devices ◦ Alarm associated to ERMS on circuit breaker ◦ The three levels of alarms from HeatTag sensors ◦ Alarms associated to **Breaker I/O** device connected downstream to an I/O Smart Link gateway ◦ Communication loss alarm for wireless device connected downstream to a child gateway.		●

General features		Availability
Protocols	Modbus TCP/IP server	●
	Modbus TCP/IP client	●
	DHCP client	●
	DHCP server	●
	DPWS server	●
	HTTPS	●
	SFTP client	●
Data export	Panel Server webpages for publication on SFTP server	●
	Publication on Schneider Electric cloud by using Panel Server webpages	●
	CSV export on PC by using Panel Server webpages	●

Commissioning and Monitoring Features

The following table presents the availability of commissioning and monitoring features on Panel Server Advanced in firmware version 001.007.000.

● Available

● Not available

Commissioning and monitoring features		Availability
Modbus serial communication	Commissioning of feature to use the Modbus serial port in reverse mode by using Panel Server webpages	●
Digital inputs (PAS800L)	Commissioning by using EcoStruxure Power Commission software	●
	Commissioning by using Panel Server webpages	●
	Monitoring by using EcoStruxure Power Commission software	●
	Monitoring by using Panel Server webpages	●
	Status assignment from a list of predefined values for each generic input/output in the **IO status** setting by using EcoStruxure Power Commission software or Panel Server webpages	●
Firmware update	Applied to one Panel Server gateway by using EcoStruxure Power Commission software	●
	Applied to one Panel Server gateway by using Panel Server webpages	●
	Applied to several Panel Server gateways by using EcoStruxure Power Commission software	●
	Applied to several Panel Server gateways by using Panel Server webpages	●
Backup restore	Backup restore on a Panel Server of the same model by using EcoStruxure Power Commission software	●
	Backup restore on a Panel Server of the same model by using Panel Server webpages	●
Configuration	Configuration by using EcoStruxure Power Commission software	●
	Ethernet configuration for upstream communication by using Panel Server webpages	●
	Modbus configuration of Modbus TCP/IP and Modbus serial devices by using Panel Server webpages	●
	Selective pairing of wireless devices by using EcoStruxure Power Commission software	●
	Selective pairing of wireless devices by using Panel Server webpages	●
	Disable concurrently and permanently the wireless networks (Wi-Fi and IEEE 802.15.4) in the Panel Server by using Panel Server webpages	●
Monitoring	Display of data of I/O Smart Link devices by using Panel Server webpages	●
	Display of data of Panel Server digital inputs by using Panel Server webpages	●
	Display of data of the supported devices (see commercial references in Supported Devices, page 22) by using Panel Server webpages	●

Commissioning and monitoring features		**Availability**
	Diagnostic by using Panel Server webpages	●
Email notification	Email notification of selected alarms by using EcoStruxure Power Commission software	●
	Email notification of selected alarms by using Panel Server webpages	●
Data logging	Access to 3-year data logger with predefined data sampling that can be configured by using Panel Server webpages	●
	Access to 3-year data logger with predefined data sampling with EcoStruxure Power Commission software	●

Performance and Limitations

- Performance and limitations on Panel Server Advanced:
  - No manual addition of wireless devices connected to a child/downstream gateway by using EcoStruxure Power Commission software.
  - The typical response time to Modbus TCP/IP request for a wireless IEEE 802.15.4 device is 30 ms.
  - Automatic discovery of wireless devices under a child gateway is limited to 128 devices because wireless devices are seen as Modbus TCP/IP devices.
  - The maximum response time to Modbus TCP/IP request for a wireless IEEE 802.15.4 device is 1 s, set up Modbus/TCP client timeout accordingly.
  - Typical Panel Server latency between Modbus TCP/IP request forwarded to the Modbus serial network is 10 ms.
  - Wi-Fi function available through a connection to a Wi-Fi infrastructure only. Access point function not available.
  - A few device identification data of the aggregated devices connected downstream a Smartlink SI B or Smartlink SI D (such as I/O Smart Link or wireless devices) are displayed in the Panel Server webpage if those data are configured and commissioned from the Smartlink SI B or Smartlink SI D webpage.
  - Keep firmware up to date in order to allow the Schneider Electric Customer Care Center to remotely access the Panel Server webpages. Remote access certificate validity is as follows:
    - Panel Server Firmware versions 001.004.000, 001.005.000, 001.005.001: certificate expired.
    - Panel Server Firmware version 001.006.000: certificate valid until 28 January 2024.

    For more information about Firmware Update, refer to DOCA0172EN *EcoStruxure Panel Server - User Guide*.
- Limitations on logging and alarming:
  - The number of individual data points that can be sampled is limited to 2,000 and limited to a flow of 500 data points per minute.
  - The number of individual alarms that can be configured for monitoring and sending an email notification is limited to 100.
- Limitations on I/O Smart Link:
  - I/O contextualization (**IO status** setting in EcoStruxure Power Commission software or Panel Server webpages) is not available.
  - Circuit breaker status is not published in case of selection of **Wired Devices** family.
  - **Signal Element** as predefined **Standard I/O** is not available.
  - No predefined configuration is available for Schneider Electric pulse counters.
  - Neither operating time, nor operation counter, nor trip counter for **Wired devices** and **Standard I/O**.
- Limitations on wireless devices:
  - Within a parent-child Panel Server gateway configuration, the modification of a contextualized setting of a device to the child Panel Server (for example, auxiliary position modified from SD to SDE) is not automatically reflected in the parent gateway. A manual update in the parent Panel Server is required to display modifications.
  - Wireless indication auxiliary: the Panel Server does not manage alarm notification by email or to Schneider Electric cloud applications.
  - PowerTag Control:
    - Feedback loop in contactor mode is not supported.

- Configuration in impulse relay mode is not supported.
- If a PowerTag Control device is connected to a child gateway:
  - ◊ No automatic discovery.
  - ◊ No data is published to the parent gateway. To be able to publish at the parent gateway level, a custom model has to be developed for the parent gateway.
  - ◊ No control function is available through the Panel Server webpages.
- Pairing process to be followed:
  1. Pair the PowerTag Control devices if any in the configuration (all the other wireless devices must be unpowered).
  2. Pair the PowerLogic HeatTag sensors if any in the configuration.
  3. Pair PowerLogic PD100 if any in the configuration.
  4. Pair the other wireless devices.

◦ PowerTag Display: not supported by Panel Server Advanced.

- Limitations on Modbus circuit breakers
  - ◦ Panel Server does not support MicroLogic 2.0 E.

    MicroLogic 7.0 E is partially supported.

    MicroLogic 5.0 E and 6.0 E are supported.
  - ◦ Panel Server does not support multiple Modbus/TCP connections to MicroLogic command interface when the MicroLogic is connected under an IFM interface.
- Limitations on topology publication to the Schneider Electric cloud: all the devices must be connected at least once to the Panel Server to enable the correct topology to be published to the Schneider Electric cloud.

  NOTE: If the Panel Server is rebooted before sending the topology, all devices should be connected while rebooting to enable the correct topology publication. In the case of a parent/child configuration, devices should have connected status on the parent device.
- Limitations on custom model for wireless devices connected under a child gateway: if a custom model uses the same name as a predefined model and devices are already associated with the predefined model, follow this procedure to load the custom model:
  1. Decommission any device already associated with the predefined model.
  2. Load the custom model in the Panel Server.
  3. Reboot the Panel Server.
  4. Associate the devices with the newly loaded custom model.
  5. Publish the topology in case of use of the Panel Server with a Schneider Electric cloud application such EcoStruxure Asset Advisor or EcoStruxure Resource Advisor.

Firmware Version 001.006.000

New Features

- I/O Smart Link (reference A9XMSB11): full support of commissioning and control function of the device outputs by using Panel Server webpages.
- Addition of wireless devices:
  - PowerTag Control: commissioning by using Panel Server webpages or EcoStruxure Power Commission software.
  - PowerLogic PD100 partial discharge monitoring sensor: commissioning by using Panel Server webpages.
- PowerTag Control digital input settings: predefined contextualization values. For example, **Fan status** is available when configuring the status of an IO device connected to either one of the input of the PowerTag Control 2DI wireless device, or the input or output of a PowerTag Control IO wireless device.
- Enhancement of Panel Server features for EcoStruxure Asset Advisor and EcoStruxure Resource Advisor:
  - Panel Server supports additional enhancements for custom model properties, by using EPC-Web software:
    - Additional option for properties: LogicCode.
    - Byte ordering at measurement level.
  - PowerLogic HeatTag enhancements.
  - Modbus TCP/IP and Modbus serial devices on unit ID 248 to 254.
  - Panel Server supports custom alarms in custom models created in EPC-Web software.

General Features

The following table presents the availability of general features on Panel Server Advanced in firmware version 001.006.000.

● Available

● Not available

General features		Availability
Functionality	Separated network topology	●
	Switched network topology	●
	Connection to Edge Control (EcoStruxure Power Monitoring Expert, EcoStruxure Power Operation,EcoStruxure Building Operation, any Building Management System, or third-party monitoring or supervision system)	●
	Ability to disable concurrently and permanently the wireless networks (Wi-Fi and IEEE 802.15.4) by using Panel Server webpages	●
Wi-Fi	2.4 GHz	●
	5 GHz	●
	External Wi-Fi antenna (reference: PASA-ANT1)	●
IEEE 802.15.4 communication	Maximum number of wireless devices: • Up to 40 wireless devices as combination of PowerTag Energy sensors, PowerLogic Tag energy sensors, Acti9 Active, wireless indication auxiliaries for ComPacT and PowerPacT circuit breakers, wireless CO_2 sensors, wireless temperature and humidity sensors, PowerTag A, PowerTag Ambient, Easergy TH110/CL110 environmental sensors, and PowerLogic HeatTag sensors, PowerTag Control, and PowerLogic PD100 with maximum 10 PowerTag Control devices, maximum 15 PowerLogic HeatTag, and maximum 15 PowerLogic PD100 sensors • or up to 85 Easergy TH110/CL110 environmental sensors **NOTE:** Total number of PowerTag Control, PowerLogic HeatTag, and PowerLogic PD100 should not exceed 20 devices.	●
Modbus TCP/IP communication	64 Modbus TCP/IP devices maximum including devices physically connected to the Panel Server and virtual devices (that is, IEEE 802.15.4 devices connected to a child Panel Server gateway)	●
Human Machine Interface (HMI)	FDM128 Ethernet display	●
	PowerTag Link display	●
Backup restore	Backup and Panel Server configuration restore by using Panel Server webpages and EcoStruxure Power Commission software	●
Configuration	User management by single user account	●
	User management by multiple users with Role-Based Access Control (RBAC)	●
Alarms	• In general, publication of alarms supported by the end devices. • Publication of alarms related to: ◦ Communication issue between a device and Panel Server when available from the end devices ◦ ERMS on circuit breaker ◦ The three levels of alarms from HeatTag sensors	●
Protocols	Modbus TCP/IP server	●
	Modbus TCP/IP client	●
	DHCP client	●
	DHCP server	●
	DPWS server	●
	HTTPS	●
	SFTP client	●
Data export	Panel Server webpages for publication on SFTP server	●

	Publication on Schneider Electric cloud by using Panel Server webpages	●
	CSV export on PC by using Panel Server webpages	●

Commissioning and Monitoring Features

The following table presents the availability of commissioning and monitoring features on Panel Server Advanced in firmware version 001.006.000.

● Available

● Not available

Commissioning and monitoring features		**Availability**
Modbus serial communication	Commissioning of feature to use the Modbus serial port in reverse mode by using Panel Server webpages	●
Digital inputs (PAS800L)	Commissioning by using EcoStruxure Power Commission software	●
	Commissioning by using Panel Server webpages	●
	Monitoring by using EcoStruxure Power Commission software	●
	Monitoring by using Panel Server webpages	●
	Status assignment from a list of predefined values for each generic input/output in the **IO status** setting by using EcoStruxure Power Commission software or Panel Server webpages	●
Firmware update	Applied to one Panel Server gateway by using EcoStruxure Power Commission software	●
	Applied to one Panel Server gateway by using Panel Server webpages	●
	Applied to several Panel Server gateways by using EcoStruxure Power Commission software	●
	Applied to several Panel Server gateways by using Panel Server webpages	●
Backup restore	Backup restore on a Panel Server of the same model by using EcoStruxure Power Commission software	●
	Backup restore on a Panel Server of the same model by using Panel Server webpages	●
Configuration	Configuration by using EcoStruxure Power Commission software	●
	Ethernet configuration for upstream communication by using Panel Server webpages	●
	Modbus configuration of Modbus TCP/IP and Modbus serial devices by using Panel Server webpages	●
	Selective pairing of wireless devices by using EcoStruxure Power Commission software	●
	Selective pairing of wireless devices by using Panel Server webpages	●
	Disable concurrently and permanently the wireless networks (Wi-Fi and IEEE 802.15.4) in the Panel Server by using Panel Server webpages	●
Monitoring	Display of data of I/O Smart Link devices by using Panel Server webpages	●
	Display of data of Panel Server digital inputs by using Panel Server webpages	●
	Display of data of the supported devices (see commercial references in Supported Devices, page 22) by using Panel Server webpages	●
	Diagnostic by using Panel Server webpages	●
Email notification	Email notification of selected alarms by using EcoStruxure Power Commission software	●
	Email notification of selected alarms by using Panel Server webpages	●
Data logging	Access to 3-year data logger with predefined data sampling that can be configured by using Panel Server webpages	●

Commissioning and monitoring features		Availability
	Access to 3-year data logger with predefined data sampling with EcoStruxure Power Commission software	●

Performance and Limitations

- Performance and limitations on Panel Server Advanced:
  - When SFTP publication is enabled, alarms are displayed in the Panel Server webpages but are not published on SFTP Server.
  - No manual addition of wireless devices connected to a child/downstream gateway by using EcoStruxure Power Commission software.
  - Automatic discovery of wireless devices under a child gateway is limited to 64 devices because wireless devices are seen as Modbus TCP/IP devices.
  - The typical response time to Modbus TCP/IP request for a wireless IEEE 802.15.4 device is 30 ms.
  - The maximum response time to Modbus TCP/IP request for a wireless IEEE 802.15.4 device is 1 s, set up Modbus/TCP client timeout accordingly.
  - Typical Panel Server latency between Modbus TCP/IP request forwarded to the Modbus serial network is 10 ms.
  - Wi-Fi function available through a connection to a Wi-Fi infrastructure only. Access point function not available.
- Limitations on logging and alarming:
  - The number of individual data points that can be sampled is limited to 2,000 and limited to a flow of 500 data points per minute.
  - The number of individual alarms that can be configured for monitoring and sending an email notification is limited to 100.
- Limitations on I/O Smart Link:
  - I/O contextualization (**IO status** setting in EcoStruxure Power Commission software or Panel Server webpages) is not available.
  - Circuit breaker status is not published in case of selection of **Wired Devices** family.
  - **Signal Element** as predefined **Standard I/O** is not available.
  - No predefined configuration is available for Schneider Electric pulse counters.
  - Neither operating time, nor operation counter, nor trip counter for **Wired devices** and **Standard I/O**.
- Limitations on wireless devices:
  - PowerTag Control:
    - Feedback loop in contactor mode is not supported.
    - Configuration in impulse relay mode is not supported.
    - If a PowerTag Control device is connected to a child gateway:
      - ◊ No automatic discovery.
      - ◊ No data is published to the parent gateway. To be able to publish at the parent gateway level, a custom model has to be developed for the parent gateway.
      - ◊ No control function is available through the Panel Server webpages.
    - Pairing process to be followed:
      1. Pair the PowerTag Control devices if any in the configuration (all the other wireless devices must be unpowered).
      2. Pair the PowerLogic HeatTag sensors if any in the configuration.
      3. Pair PowerLogic PD100 if any in the configuration.
      4. Pair the other wireless devices.
  - PowerTag Display: not supported by Panel Server Advanced.

- Limitations on topology publication to the Schneider Electric cloud: all the devices must be connected at least once to the Panel Server to enable the correct topology to be published to the Schneider Electric cloud.
- Limitations on custom model for wireless devices connected under a child gateway: if a custom model uses the same name as a predefined model and devices are already associated with the predefined model, follow this procedure to load the custom model:
  1. Decommission any device already associated with the predefined model.
  2. Load the custom model in the Panel Server.
  3. Reboot the Panel Server.
  4. Associate the devices with the newly loaded custom model.
  5. Publish the topology in case of use of the Panel Server with a Schneider Electric cloud application such EcoStruxure Asset Advisor or EcoStruxure Resource Advisor.

Firmware Version 001.005.001

New Features

- Automatic discovery of wireless devices connected under a child gateway (Panel Server, PowerTag Link, or Smartlink SIB).
- Smartlink SIB gateway natively supported as a child gateway of Panel Server.
- Defining end-device energy by using the Panel Server webpages (**Commodity** field in the end-device details, field not published in Schneider Electric cloud services).
- For any type of PowerTag wireless devices, delivered and received energy available in Modbus registers (upload the most recent version of DOCA0241EN *EcoStruxure Panel Server - Modbus File*).
- Authentication to SFTP server enhanced to support either user name and password or user name and SSH key.
- Setting of the pulse counter type digital inputs by using the Panel Server webpages.

General Features

The following table presents the availability of general features on Panel Server Advanced in firmware version 001.005.001.

● Available

● Not available

General features		**Availability**
Functionality	Separated network topology	●
	Switched network topology	●
	Connection to Edge Control (EcoStruxure Power Monitoring Expert, EcoStruxure Power Operation,EcoStruxure Building Operation, any Building Management System, or third-party monitoring or supervision system)	●
	Ability to disable concurrently and permanently the wireless networks (Wi-Fi and IEEE 802.15.4) by using Panel Server webpages	●
Wi-Fi	2.4 GHz	●
	External Wi-Fi antenna (reference: PASA-ANT1)	●
IEEE 802.15.4 communication	Maximum number of wireless devices: • Up to 40 wireless devices as combination of PowerTag Energy sensors, PowerLogic Tag energy sensors, Acti9 Active, wireless indication auxiliaries for ComPacT and PowerPacT circuit breakers, wireless CO_2 sensors, wireless temperature and humidity sensors, PowerTag A, PowerTag Ambient, Easergy TH110/CL110 environmental sensors, and PowerLogic HeatTag sensors • or up to 65 Easergy TH110/CL110 environmental sensors	●
Modbus TCP/IP communication	64 Modbus TCP/IP devices maximum including devices physically connected to the Panel Server and virtual devices (that is, IEEE 802.15.4 devices connected to a child Panel Server gateway)	●
Human Machine Interface (HMI)	FDM128 Ethernet display	●
	PowerTag Link display	●
Backup restore	Backup and Panel Server configuration restore by using Panel Server webpages and EcoStruxure Power Commission software	●
Configuration	User management by single user account	●
	User management by multiple users with Role-Based Access Control (RBAC)	●
Alarms	Publication of alarms related to:	●

General features		Availability
	• Communication issue between a device and Panel Server when available from the end devices • ERMS on circuit breaker • The three levels of alarms from HeatTag sensors	
Protocols	Modbus TCP/IP server	●
	Modbus TCP/IP client	●
	DHCP client	●
	DHCP server	●
	DPWS server	●
	HTTPS	●
	SFTP client	●
Data export	Panel Server webpages for publication on SFTP server	●
	Publication on Schneider Electric cloud by using Panel Server webpages	●
	CSV export on PC by using Panel Server webpages	●

Commissioning and Monitoring Features

The following table presents the availability of commissioning and monitoring features on Panel Server Advanced in firmware version 001.005.001.

● Available

● Not available

Commissioning and monitoring features		Availability
Modbus serial communication	Commissioning of feature to use the Modbus serial port in reverse mode by using Panel Server webpages	●
Digital inputs (PAS800L)	Commissioning by using EcoStruxure Power Commission software	●
	Commissioning by using Panel Server webpages	●
	” Monitoring by using EcoStruxure Power Commission software	●
	Monitoring by using Panel Server webpages	●
Firmware update	Applied to one Panel Server gateway by using EcoStruxure Power Commission software	●
	Applied to one Panel Server gateway by using Panel Server webpages	●
	Applied to several Panel Server gateways by using EcoStruxure Power Commission software	●
	Applied to several Panel Server gateways by using Panel Server webpages	●
Backup restore	Backup restore on a Panel Server of the same model by using EcoStruxure Power Commission software	●
	Backup restore on a Panel Server of the same model by using Panel Server webpages	●
Configuration	Configuration by using EcoStruxure Power Commission software	●
	Ethernet configuration for upstream communication by using Panel Server webpages	●
	Modbus configuration of Modbus TCP/IP and Modbus serial devices by using Panel Server webpages	●
	Selective pairing of wireless devices by using EcoStruxure Power Commission software	●

Commissioning and monitoring features		Availability
	Selective pairing of wireless devices by using Panel Server webpages	●
	Disable concurrently and permanently the wireless networks (Wi-Fi and IEEE 802.15.4) in the Panel Server by using Panel Server webpages	●
Monitoring	Display of data of Smartlink Modbus devices by using Panel Server webpages	●
	Display of data of Panel Server digital inputs by using Panel Server webpages	●
	Display of data of the supported devices (see commercial references in Supported Devices, page 22) by using Panel Server webpages	●
	Diagnostic by using Panel Server webpages	●
Email notification	Email notification of selected alarms by using EcoStruxure Power Commission software	●
	Email notification of selected alarms by using Panel Server webpages	●
Data logging	Access to 3-year data logger with predefined data sampling that can be configured by using Panel Server webpages	●
	Access to 3-year data logger with predefined data sampling with EcoStruxure Power Commission software	●

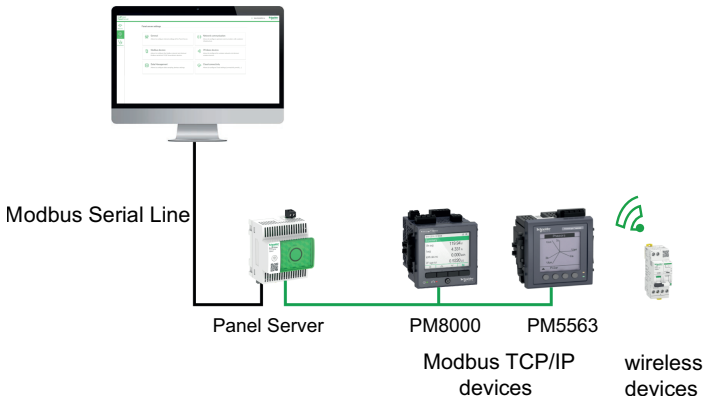
Performance and Limitations

- Performance and limitations on Panel Server Advanced:
  - When SFTP publication is enabled, alarms are displayed in the Panel Server webpages but are not published on SFTP Server.
  - No manual addition of wireless devices connected to a child/downstream gateway by using EcoStruxure Power Commission software.
  - Automatic discovery of wireless devices under a child gateway is limited to 64 devices because wireless devices are seen as Modbus TCP/IP devices.
  - The typical response time to Modbus TCP/IP request for a wireless IEEE 802.15.4 device is 30 ms.
  - The maximum response time to Modbus TCP/IP request for a wireless IEEE 802.15.4 device is 1 s, set up Modbus/TCP client timeout accordingly.
  - Typical Panel Server latency between Modbus TCP/IP request forwarded to the Modbus serial network is 10 ms.
  - Wi-Fi function available through a connection to a Wi-Fi infrastructure only. Access point function not available.
- Limitations on logging and alarming:
  - The number of individual data points that can be sampled is limited to 2,000 and limited to a flow of 500 data points per minute.
  - The number of individual alarms that can be configured for monitoring and sending an email notification is limited to 100.
- Limitations on Smartlink Modbus:
  - Commissioning by using EcoStruxure Power Commission software only (not available through Panel Server webpages).
  - Control of Smartlink Modbus output(s) by using Panel Server webpages is not available.
- Limitations on wireless devices: PowerTag Control and PowerTag Display are not supported by Panel Server Universal.

Firmware Version 001.005.000

New Features

- Backup and restore of Panel Server configuration on a Panel Server of the same model, by using Panel Server webpages or EcoStruxure Power Commission software.
- Wireless networks (Wi-Fi and IEEE 802.15.4) can be concurrently and permanently deactivated in the Panel Server by using the Panel Server webpages.
- Panel Server Modbus serial port can be configured in reverse mode on Panel Server to allow any Modbus client connected to the RS485 port, to access data from devices connected to **ETH1** and/or **ETH2** Ethernet port.



- Publication to SFTP server, of data sampled on devices connected to the Panel Server Advanced.
- Selective pairing with wireless devices by using EcoStruxure Power Commission software.
- Display in the Panel Server webpages, of data related to Panel Server digital inputs.
- For Smartlink Modbus:
  - Data related to the device displayed in Panel Server webpages.
  - Predefined alarms (circuit breaker opened, circuit breaker trip, generic input status) displayed in Panel Server webpages and available for email notification.
- Publication of alarms related to:
  - Communication issue between a device and Panel Server when available from the end devices (see DOCA0241EN *EcoStruxure Panel Server - Modbus File*).
  - Energy Reduction Maintenance Settings (ERMS) on circuit breaker.
  - The three levels of alarms from HeatTag sensor.
- Additional supported wireless devices: Acti9 Active Vigi.

Known Issues

The Earth leakage protection trip alarm is not managed by the Panel Server for ComPacT NS trip units that do not offer this alarm.

General Features

The following table presents the availability of general features on Panel Server Advanced in firmware version 001.005.000.

● Available

● Not available

General features		Availability
Functionality	Separated network topology	●
	Switched network topology	●
	Connection to Edge Control (EcoStruxure Power Monitoring Expert, EcoStruxure Power Operation,EcoStruxure Building Operation, any Building Management System, or third-party monitoring or supervision system)	●
	Panel Server webpages to disable concurrently and permanently the wireless networks (Wi-Fi and IEEE 802.15.4)	●
Wi-Fi	2.4 GHz	●
	External Wi-Fi antenna (reference: PASA-ANT1)	●
IEEE 802.15.4 communication	Maximum number of wireless devices: • Up to 40 wireless devices as combination of PowerTag Energy sensors, PowerLogic Tag energy sensors, Acti9 Active, wireless indication auxiliaries for ComPacT and PowerPacT circuit breakers, wireless CO_2 sensors, wireless temperature and humidity sensors, PowerTag A, PowerTag Ambient, Easergy TH110/CL110 environmental sensors, and PowerLogic HeatTag sensors, with a maximum of 3 HeatTag sensors • or up to 65 Easergy TH110/CL110 environmental sensors	●
Modbus TCP/IP communication	64 Modbus TCP/IP devices maximum including devices physically connected to the Panel Server and virtual devices (that is, IEEE 802.15.4 devices connected to a child Panel Server gateway)	●
Human Machine Interface (HMI)	FDM128 Ethernet display	●
	PowerTag Link display	●
Backup restore	Backup and Panel Server configuration restore by using Panel Server webpages and EcoStruxure Power Commission software	●
Configuration	User management by single user account	●
	User management by multiple users with Role-Based Access Control (RBAC)	●
Alarms	Publication of alarms related to: • Communication issue between a device and Panel Server when available from the end devices • ERMS on circuit breaker • The three levels of alarms from HeatTag sensors	●
Protocols	Modbus TCP/IP server	●
	Modbus TCP/IP client	●
	DHCP client	●
	DHCP server	●
	DPWS server	●
	HTTPS	●
	SFTP client	●

Commissioning and Monitoring Features

The following table presents the availability of commissioning and monitoring features on Panel Server Advanced in firmware version 001.005.000.

● Available

● Not available

Commissioning and monitoring features		Availability
Modbus serial communication	Commissioning of feature to use the Modbus serial port in reverse mode by using Panel Server webpages	●
Digital inputs (PAS800L)	Commissioning by using EcoStruxure Power Commission software	●
	Commissioning by using Panel Server webpages	●
	Monitoring by using EcoStruxure Power Commission software	●
	Monitoring by using Panel Server webpages	●
Firmware update	Applied to one Panel Server gateway by using EcoStruxure Power Commission software	●
	Applied to one Panel Server gateway by using Panel Server webpages	●
	Applied to several Panel Server gateways by using EcoStruxure Power Commission software	●
	Applied to several Panel Server gateways by using Panel Server webpages	●
Backup restore	Backup restore on a Panel Server of the same model by using EcoStruxure Power Commission software	●
	Backup restore on a Panel Server of the same model by using Panel Server webpages	●
Configuration	Configuration by using EcoStruxure Power Commission software	●
	Ethernet configuration for upstream communication by using Panel Server webpages	●
	Modbus configuration of Modbus TCP/IP and Modbus serial devices by using Panel Server webpages	●
	Selective pairing of wireless devices by using EcoStruxure Power Commission software	●
	Selective pairing of wireless devices by using Panel Server webpages	●
	Disable concurrently and permanently the wireless networks (Wi-Fi and IEEE 802.15.4) in the Panel Server by using Panel Server webpages	●
Monitoring	Display of data of Smartlink Modbus devices by using Panel Server webpages	●
	Display of data of Panel Server digital inputs by using Panel Server webpages	●
	Display of data of the supported devices (see commercial references in Supported Devices, page 22) by using Panel Server webpages	●
	Diagnostic by using Panel Server webpages	●
Email notification	Email notification of selected alarms by using EcoStruxure Power Commission software	●
	Email notification of selected alarms by using Panel Server webpages	●
Data logging	Access to 3-year data logger with predefined data sampling that can be configured by using Panel Server webpages	●
	Access to 3-year data logger with predefined data sampling with EcoStruxure Power Commission software	●
Data export	Panel Server webpages for publication on SFTP server	●
	Publication on Schneider Electric cloud by using Panel Server webpages	●
	CSV export on PC by using Panel Server webpages	●

Performance and Limitations

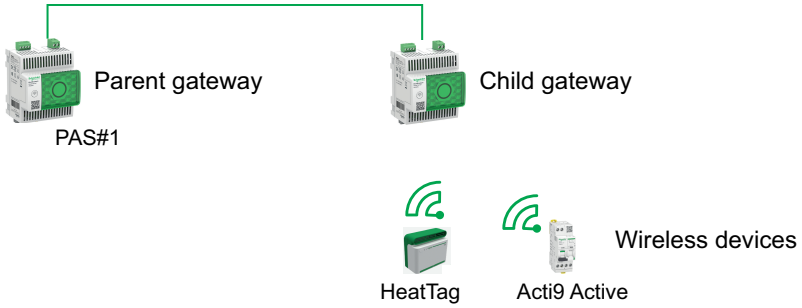
- Performance and limitations on Panel Server Advanced:
  - No manual addition of wireless devices connected to a child/downstream gateway by using EcoStruxure Power Commission software.
  - The typical response time to Modbus TCP/IP request for a wireless IEEE 802.15.4 device is 30 ms.
  - The maximum response time to Modbus TCP/IP request for a wireless IEEE 802.15.4 device is 1 s, set up Modbus/TCP client timeout accordingly.
  - Typical Panel Server latency between Modbus TCP/IP request forwarded to the Modbus serial network is 10 ms.
  - Wi-Fi function available through a connection to a Wi-Fi infrastructure only. Access point function not available.
- Limitations on logging and alarming:
  - The number of individual data points that can be sampled is limited to 2,000 and limited to a flow of 500 data points per minute.
  - The number of individual alarms that can be configured to trigger an email is limited to 100.
- Limitations on Smartlink Modbus:
  - Commissioning by using EcoStruxure Power Commission software only, not by using Panel Server webpages.
  - Status of Smartlink Modbus output not displayed on Panel Server webpages.
  - Alarms not displayed on EcoStruxure Panel Server webpages.
  - No control of Smartlink Modbus by using Panel Server webpages.
- Limitations on wireless devices: PowerTag Control and PowerTag Display are not supported by Panel Server Universal.

Firmware Version 001.004.000

New Features

- Connection to EcoStruxure cloud applications:
  - EcoStruxure Facility Expert Energy
  - EcoStruxure Energy Hub
  - EcoStruxure Resource Advisor
  - EcoStruxure Asset Advisor
- Manual addition of wireless devices connected to a child/downstream gateway through the Panel Server webpages (not available with EcoStruxure Power Commission software). For example, child/downstream gateways can be a Panel Server or PowerTag Link.

  Example: Two wireless devices are connected to a child/downstream Panel Server in a separate topology. The child/downstream gateway is connected to one Ethernet port of the parent/upstream Panel Server (PAS#1). For more information, refer to DOCA0172EN *EcoStruxure Panel Server - User Guide*.



- Additional supported Modbus Serial devices: Power Factor controller VarPlus Logic VL6 and VL12.

Known Issues

The Earth leakage protection trip alarm is not managed by the Panel Server for ComPacT NS trip units that do not offer this alarm.

Features

The following table presents the availability of features on Panel Server Advanced in firmware version 001.004.000.

● Available

● Not available

Features		Availability
Functionality	Separated network topology	🟢
	Switched network topology	🟢
	Connection to Edge Control (EcoStruxure Power Monitoring Expert, EcoStruxure Power Operation,EcoStruxure Building Operation, any Building Management System, or third-party monitoring or supervision system)	🟢
	Embedded webpages for diagnostic	🟢
	Embedded webpages for monitoring all the supported devices (see commercial references in Supported Devices, page 22)	🟢
	Embedded webpages for display of active predefined alarms from any device connected to the Panel Server	🟢
	Access to 3-year data logger with predefined data sampling that can be configured with embedded webpages	🟢
	Access to 3-year data logger with predefined data sampling with EcoStruxure Power Commission software	🔴
	Export of CSV file of the logged data to a PC with embedded webpages	🟢
	Export of CSV file of the logged data with EcoStruxure Power Commission software	🔴
	Email notification of selected alarms with embedded webpages	🟢
	Email notification of selected alarms with EcoStruxure Power Commission software	🔴
Wi-Fi	2.4 GHz	🟢
	5 GHz	🟢
	External Wi-Fi antenna (reference: PASA-ANT1)	🟢
IEEE 802.15.4 communication	Maximum number of wireless devices: • Up to 30 wireless devices as combination of PowerTag Energy sensors, PowerLogic Tag energy sensors, Acti9 Active, wireless indication auxiliaries for ComPacT and PowerPacT circuit breakers, wireless CO_2 sensors, wireless temperature and humidity sensors, PowerTag A, PowerTag Ambient, environmental sensors Easergy TH110/CL110, and PowerLogic HeatTag sensors, with a maximum of 3 PowerLogic HeatTag • or up to 65 environmental sensors Easergy TH110/CL110	🟢
	External antenna for wireless devices (reference: PASA-ANT1)	🟢
Digital inputs (PAS800L)	Commissioning with EcoStruxure Power Commission software	🟢
	Commissioning with Panel Server webpages	🔴
	Monitoring with EcoStruxure Power Commission software and Panel Server webpages	🟢
Human Machine Interface (HMI)	FDM128 Ethernet display	🟢
	PowerTag Link display	🔴
Firmware update	Applied to one Panel Server gateway with EcoStruxure Power Commission software	🟢
	Applied to one Panel Server gateway with Panel Server webpages	🟢
	Applied to several Panel Server gateways with EcoStruxure Power Commission software	🟢
	Applied to several Panel Server gateways with Panel Server webpages	🔴
Configuration	EcoStruxure Power Commission software	🟢
	Embedded webpages for Ethernet settings for upstream communication	🟢
	Embedded webpages for Modbus settings of Modbus TCP/IP and Modbus Serial devices	🟢
	User management by single user account	🟢
	User management by multiple users with Role-Based Access Control (RBAC)	🔴

Features		Availability
Protocols	Modbus TCP/IP server	●
	Modbus TCP/IP client	●
	DHCP client	●
	DHCP server	●
	DPWS	●
	HTTPS	●

Performance and Limitations

- Performance and limitations on Panel Server Advanced:
  - No connection to EcoStruxure Facility Expert Operations.
  - No manual addition of wireless devices connected to a child/downstream gateway through EcoStruxure Power Commission software.
  - Function to backup and restore Panel Server configuration not available.
  - Alarms not set and not displayed in Panel Server webpages.
  - The typical response time to Modbus TCP/IP request for a wireless IEEE 802.15.4 device is 30 ms.
  - The maximum response time to Modbus TCP/IP request for a wireless IEEE 802.15.4 device is 1 s, set up Modbus/TCP client time-out accordingly.
  - Typical Panel Server latency between Modbus TCP/IP request forwarded to the Modbus RS485 network is 10 ms.
  - Wi-Fi function available through a connection to a Wi-Fi infrastructure only. Access point function not available.
- Limitations on logging and alarming:
  - The number of individual data points that can be logged is limited to 2000.
  - The number of individual alarms that can be configured to trigger an email is limited to 100.
- Limitations on Smartlink Modbus:
  - Commissioning through EcoStruxure Power Commission software, not through Panel Server webpages.
  - Status of Smartlink Modbus inputs/outputs or counter available from the Modbus registers, not displayed on Panel Server webpages.
  - Alarms not displayed in EcoStruxure Panel Server webpages.
  - No control of Smartlink Modbus through Panel Server webpages.
- Limitations on wireless devices: PowerTag Control are not supported by Panel Server Advanced.

Firmware Version 001.003.002

New Features

- Active predefined alarms from any device connected to the Panel Server are displayed in the Panel Server webpages.
- 3-year data logger with predefined data sampling that can be configured.
- CSV file export of the logged data can be downloaded on your PC.
- Email notification of alarms selected by the user.

Known Issues

- EcoStruxure Power Commission software version 2.24.1 does not use virtual server ID to access Modbus Serial devices.

  When a *virtual server ID* different from the *physical Modbus address / server ID* is allocated to a Modbus Serial device, EcoStruxure Power Commission software version 2.24.1 uses the physical Modbus address / server ID to access the Modbus Serial device.

  To avoid any issue during commissioning of Modbus Serial devices in EcoStruxure Power Commission software, ensure that the physical Modbus address / server ID and the virtual server ID of each downstream Modbus device under the Panel Server gateway are unique and have not been previously assigned as a physical Modbus address or virtual server ID to any wireless, Modbus Serial, or Modbus TCP/IP device.

  To solve this issue, proceed as follows:

  - Option 1 - Change the physical Modbus address of the device on the Modbus Serial network as follows:

    1. Set the physical Modbus address of the device to a value not assigned as virtual server ID to any other wireless, Modbus Serial, or Modbus TCP/IP device.
    2. Login to the Panel Server webpages and update accordingly the physical Modbus address / server ID of the device in the Panel Server.

  - Option 2 - Change the virtual server ID of the device in the Panel Server as follows:

    Login to the Panel Server webpages and change the virtual server ID of the device to a value different from the physical Modbus address / server ID of any other device on the Modbus Serial network.

- Webpages freeze when several Modbus Serial devices are missing.

  When several Modbus Serial devices are being disconnected (4 devices or more) at the same time, the Panel Server webpages can become frozen while the Panel Server is still attempting to communicate with the missing devices.

  Webpages operation recovers:

  - When, after several retries, the Panel Server detects that the devices are disconnected.
  - After reconnecting the missing devices.

- Limitations on logging and alarming.

  The number of data points that can be logged and the number of alarms that can configured to trigger an email is limited according to the following rule:

  Number of data points + (20 x Number of alarms) ≤ 1000

  For Modbus Serial and Modbus TCP/IP, whatever the number of alarms configured for a single device, it counts for 2 alarms in the above formula.

  Example: A Panel Server system with:

  - 5 PowerTag with 20 data points and 2 alarms
  - 3 ComPacT NSX with 20 data points and 5 alarms

    The total number of data points is equal to 5 x 20 + 3 x 20 + 20 x (5 x 2 + 3 x 2) = 480.

  Respect the above limitation to help avoid leading to degraded operation such as missing measurement acquisition and missing or delayed alarm notification.

- Logging configuration loss in specific cases.

  Devices are provided with a default configuration of data points to be logged with a default sampling period. This configuration is applied when the device is first added to the Panel Server.

  If the default configuration is changed such that the device is configured not to log any data, the default configuration is applied again to the device after a power loss or restart. There is no palliative action.

Features

The following table presents the availability of features on Panel Server Advanced in firmware version 001.003.002.

● Available

● Not available

Features		Availability
Functionality	Separated network topology	●
	Switched network topology	●
	Connection to Edge Control (EcoStruxure Power Monitoring Expert, EcoStruxure Power Operation,EcoStruxure Building Operation, any Building Management System, or third-party monitoring or supervision system)	●
	Embedded webpages for diagnostic	●
	Embedded webpages for monitoring all the supported devices (see commercial references in Supported Devices, page 22)	●
	Embedded webpages for display of active predefined alarms from any device connected to the Panel Server	●
	Access to 3-year data logger with predefined data sampling that can be configured with embedded webpages	●
	Access to 3-year data logger with predefined data sampling with EcoStruxure Power Commission software	●
	Export of CSV file of the logged data to a PC with embedded webpages	●
	Export of CSV file of the logged data with EcoStruxure Power Commission software	●
	Email notification of selected alarms with embedded webpages	●
	Email notification of selected alarms with EcoStruxure Power Commission software	●
Wi-Fi	2.4 GHz	●
	5 GHz	●
	External Wi-Fi antenna (reference: PASA-ANT1)	●
IEEE 802.15.4 communication	Maximum number of wireless devices: • Up to 30 wireless devices as combination of PowerTag Energy sensors, PowerLogic Tag energy sensors, Acti9 Active, wireless indication auxiliaries for ComPacT and PowerPacT circuit breakers, wireless CO_2 sensors, wireless temperature and humidity sensors, PowerTag A, PowerTag Ambient, environmental sensors Easergy TH110/CL110, and PowerLogic HeatTag sensors, with a maximum of: ◦ 20 PowerTag or PowerLogic Tag energy sensors, or Acti9 Active ◦ 3 PowerLogic HeatTag ◦ 6 wireless indication auxiliaries for ComPacT and PowerPacT circuit breakers • or up to 65 environmental sensors Easergy TH110/CL110	●
	External antenna for wireless devices (reference: PASA-ANT1)	●
Digital inputs (PAS800L)	Commissioning with EcoStruxure Power Commission software	●
	Commissioning with Panel Server webpages	●
	Monitoring with EcoStruxure Power Commission software and Panel Server webpages	●
Human Machine Interface (HMI)	FDM128 Ethernet display	●
	PowerTag Link display	●

Features		Availability
Firmware update	Applied to one Panel Server gateway with EcoStruxure Power Commission software	●
	Applied to one Panel Server gateway with Panel Server webpages	●
	Applied to several Panel Server gateways with EcoStruxure Power Commission software	●
	Applied to several Panel Server gateways with Panel Server webpages	●
Configuration	EcoStruxure Power Commission software	●
	Embedded webpages for Ethernet settings for upstream communication	●
	Embedded webpages for Modbus settings of Modbus TCP/IP and Modbus Serial devices	●
	User management by single user account	●
	User management by multiple users with Role-Based Access Control (RBAC)	●
Protocols	Modbus TCP/IP server	●
	Modbus TCP/IP client	●
	DHCP client	●
	DHCP server	●
	DPWS	●
	HTTPS	●

Performance and Limitations

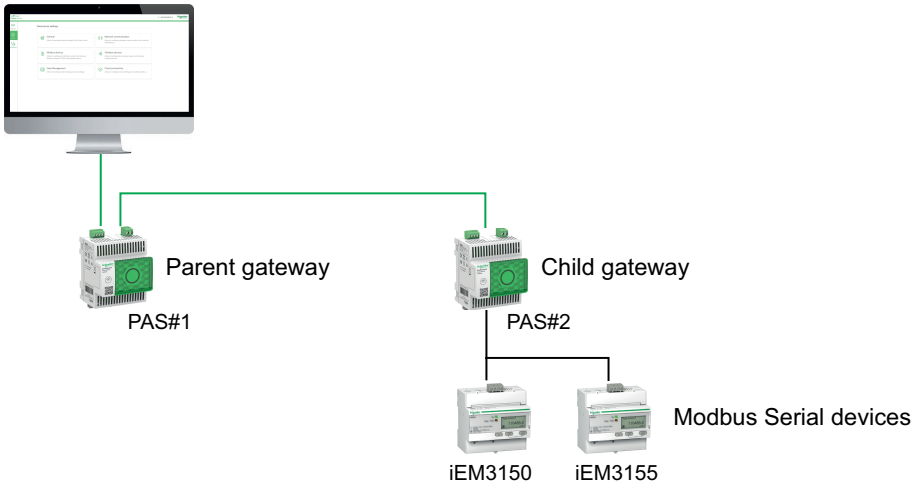
- Performance and limitations on Panel Server Advanced:
  - Function to backup and restore Panel Server configuration not available.
  - Alarms not set and not displayed in Panel Server webpages.
  - No capability to collect data from a wireless end device connected to a child/downstream gateway of the Panel Server such as another Panel Server, a PowerTag Link, or a Smartlink SIB gateway).
  - The typical response time to Modbus TCP/IP request for a wireless IEEE 802.15.4 device is 30 ms.
  - The maximum response time to Modbus TCP/IP request for a wireless IEEE 802.15.4 device is 1 s, set up Modbus/TCP client time-out accordingly.
  - Typical Panel Server latency between Modbus TCP/IP request forwarded to the Modbus RS485 network is 10 ms.
  - Wi-Fi function available through a connection to a Wi-Fi infrastructure only. Access point function not available.
- Limitations on Smartlink Modbus:
  - Commissioning through EcoStruxure Power Commission software, not through Panel Server webpages.
  - Status of Smartlink Modbus inputs/outputs or counter available from the Modbus registers, not displayed on Panel Server webpages.
  - Alarms not displayed in EcoStruxure Panel Server webpages.
  - No control of Smartlink Modbus through Panel Server webpages.
- Limitations on wireless devices: PowerTag Control are not supported by Panel Server Advanced.

Firmware Version 001.003.001

Overview

- EcoStruxure Panel Server webpages for monitoring.
- Alarms for PowerTag and PowerLogic Tag wireless energy sensors:
  - 45% rated current alarm
  - 50% rated current alarm
  - 80% rated current alarm
  - Zero current alarm
- Wi-Fi infrastructure mode using internal antenna or external antenna (reference PASA-ANT1).
- External antenna for wireless devices (reference PASA-ANT1).
- Manual addition of Modbus Serial devices connected to a child/downstream gateway. For example, child/downstream gateways can be Panel Server, Link150 or third-party gateways.

  Example: Two Modbus Serial devices are connected to a child/downstream Panel Server in a separate topology. The child/downstream Panel Server (PAS#2) is connected to one Ethernet port of the parent/upstream Panel Server (PAS#1). For more information, refer to DOCA0172EN *EcoStruxure Panel Server - User Guide*.



- Ethernet diagnostics to help with validating the Panel Server integration into upstream communication.
- Languages supported in Panel Server webpages: English, French, Italian, Spanish, German, Russian.
- For wireless devices, configuration of communication period per family (energy, ambient, control) on Panel Server webpages and EcoStruxure Power Commission software.
- FDM128 display supported but need to update to last version of FDM128 firmware (version 8.0.30 or higher). For detailed information about supported wireless devices, refer to DOCA0151EN *Enerlin'X FDM128– Ethernet Display for Eight Devices– Firmware Release Notes*.

  Acti9 Active, wireless indication auxiliaries for ComPacT and PowerPacT, and PowerLogic Tag are not displayed.
- Remote access (a local action is required to enable remote access to the Panel Server webpages).

Known Issues

EcoStruxure Power Commission software version 2.24 does not use virtual server ID to access Modbus Serial devices.

When a *virtual server ID* different from the *physical Modbus address / server ID* is allocated to a Modbus Serial device, EcoStruxure Power Commission software version 2.24 uses the physical Modbus address / server ID to access the Modbus Serial device.

To avoid any issue during commissioning of Modbus Serial devices in EcoStruxure Power Commission software, ensure that the physical Modbus address / server ID and the virtual server ID of each downstream Modbus device under the Panel Server gateway are unique and have not been previously assigned as a physical Modbus address or virtual server ID to any wireless, Modbus Serial, or Modbus TCP/IP device.

To solve this issue, proceed as follows:

- Option 1 - Change the physical Modbus address of the device on the Modbus Serial network as follows:
  1. Set the physical Modbus address of the device to a value not assigned as virtual server ID to any other wireless, Modbus Serial, or Modbus TCP/IP device.
  2. Login to the Panel Server webpages and update accordingly the physical Modbus address / server ID of the device in the Panel Server.
- Option 2 - Change the virtual server ID of the device in the Panel Server as follows:

  Login to the Panel Server webpages and change the virtual server ID of the device to a value different from the physical Modbus address / server ID of any other device on the Modbus Serial network.

Features

The following table presents the availability of features on Panel Server Advanced in firmware version 001.003.001.

● Available

● Not available

Features		**Availability**
Functionality	Separated network topology	●
	Switched network topology	●
	Connection to Edge Control (EcoStruxure Power Monitoring Expert, EcoStruxure Power Operation,EcoStruxure Building Operation, any Building Management System, or third-party monitoring or supervision system)	●
	Embedded webpages for diagnostic	●
	Embedded webpages for monitoring all the supported devices (see commercial references in Supported Devices, page 22).	●
Wi-Fi	2.4 GHz	●
	5 GHz	●
	External Wi-Fi antenna (reference: PASA-ANT1)	●

Features		Availability
IEEE 802.15.4 communication	Maximum number of wireless devices: • Up to 30 wireless devices as combination of PowerTag Energy sensors, PowerLogic Tag energy sensors, Acti9 Active, wireless indication auxiliaries for ComPacT and PowerPacT circuit breakers, wireless CO_2 sensors, wireless temperature and humidity sensors, PowerTag A, PowerTag Ambient, environmental sensors Easergy TH110/CL110, and PowerLogic HeatTag sensors, with a maximum of: ◦ 20 PowerTag or PowerLogic Tag energy sensors, or Acti9 Active ◦ 3 PowerLogic HeatTag ◦ 6 wireless indication auxiliaries for ComPacT and PowerPacT circuit breakers • or up to 65 environmental sensors Easergy TH110/CL110	●
	External antenna for wireless devices (reference: PASA-ANT1)	●
Digital inputs (PAS800L)	Commissioning with EcoStruxure Power Commission software	●
	Commissioning with Panel Server webpages	●
	Monitoring with EcoStruxure Power Commission software and Panel Server webpages	●
Human Machine Interface (HMI)	FDM128 Ethernet display	●
	PowerTag Link display	●
Configuration	EcoStruxure Power Commission software	●
	Embedded webpages for Ethernet settings for upstream communication	●
	Embedded webpages for Modbus settings of Modbus TCP/IP and Modbus Serial devices	●
	User management by single user account	●
	User management by multiple users with Role-Based Access Control (RBAC)	●
Protocols	Modbus TCP/IP server	●
	Modbus TCP/IP client	●
	DHCP client	●
	DHCP server	●
	DPWS	●
	HTTPS	●

Performance and Limitations

- Performance and limitations on Panel Server Advanced:
  - Function to backup and restore Panel Server configuration not available.
  - Alarms not set and not displayed in Panel Server webpages.
  - No capability to collect data from a wireless end device connected to a child/downstream gateway of the Panel Server such as another Panel Server, a PowerTag Link, or a Smartlink SIB gateway).
  - The typical response time to Modbus TCP/IP request for a wireless IEEE 802.15.4 device is 30 ms.
  - The maximum response time to Modbus TCP/IP request for a wireless IEEE 802.15.4 device is 1 s, set up Modbus/TCP client time-out accordingly.
  - Typical Panel Server latency between Modbus TCP/IP request forwarded to the Modbus RS485 network is 10 ms.
  - Wi-Fi function available through a connection to a Wi-Fi infrastructure only. Access point function not available.

- Limitations on Smartlink Modbus:
  - Commissioning through EcoStruxure Power Commission software, not through Panel Server webpages.
  - Status of Smartlink Modbus inputs/outputs or counter available from the Modbus registers, not displayed on Panel Server webpages.
  - Alarms not displayed in EcoStruxure Panel Server webpages.
  - No control of Smartlink Modbus through Panel Server webpages.
- Limitations on wireless devices: PowerTag Control are not supported by Panel Server Advanced.

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