

# **EcoStruxure Panel Server Universal**

# **Firmware Release Notes**

Wireless Devices Concentrator and Modbus Gateway

**EcoStruxure** offers IoT-enabled architecture and platform.

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# **About the Document**

# **Document Scope**

This document provides users with the following information about the EcoStruxure<sup>™</sup> Panel Server Universal 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 Universal gateway with firmware version 002.002.000.

# **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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  - Access the cybersecurity posture.
  - Learn more about cybersecurity in the cybersecurity academy.
  - Explore the cybersecurity services from Schneider Electric.

# **Available Languages of the Document**

The document is available in these languages:

- English (DOCA0178EN), original language
- French (DOCA0178FR)
- German (DOCA0178DE)
- Italian (DOCA0178IT)
- Portuguese (DOCA0178PT)
- Spanish (DOCA0178ES)

# **Related Documents**

Title of documentation	Publication date	Reference number
EcoStruxure Panel Server - User Guide	04/2025	DOCA0172EN
		DOCA0172DE
		DOCA0172ES
		DOCA0172FR
		DOCA0172IT
		DOCA0172PT
EcoStruxure Panel Server - Modbus File	04/2025	DOCA0241EN
EcoStruxure Panel Server - Alarm File	01/2025	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 Universal Gateway**

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

Panel Server Universal is a data concentrator for wireless devices and wired Modbus devices (see detailed list).

Panel Server Universal is available with different power supplies:

- PAS600: 110-277 Vac/Vdc
- PAS600L, PAS600LWD: 24 Vdc
- PAS600T: 110–240 Vac/Vdc
- PAS600P: Power over Ethernet (PoE)
- PAS600PWD: Power over Ethernet (PoE)

Panel Server Universal 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 (PAS600L, PAS600LWD)
- · Wi-Fi external antenna
- IEEE 802.15.4 external antenna port (for HW: V2.0 PAS600, PAS600L, PAS600P only)
- Data sampling
- 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 Universal firmware version	Availability
April 2025	002.002.000	Latest commercial release
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
October 2021	001.002.000	Obsolete
April 2021	001.001.000	Obsolete

# **Firmware Update Policy**

Firmware update is recommended to benefit from the latest features and potential bug fixes.

# Firmware Update with EcoStruxure Power Commission Software

Use the latest version (version 2.32.0 or higher) 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.
- 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 002.002.000

### 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.
- 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
002.002.000	27 January 2026
002.001.000	24 November 2025
002.000.000	22 May 2025

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.
- When SFTP or HTTPS publication is enabled, alarms are displayed in the Panel Server webpages but are not published on SFTP or HTTPS servers.
- 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.

### **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:
  - 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.

- 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	!	#	\$	%	&	6	*	+	,	-		=	?	@	١	^	-		~

• 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 23
- Modbus Serial Devices Circuit Breakers and Associated Trip Units connected via IFM interface or BSCM Modbus SL/ULP module, page 26

**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.

### 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.

# **General Features**

The following table presents the availability of general features on Panel Server Universal in firmware version 002.002.000.

Available
7 11 011 01010

#### 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 (hardware version 002.000.000)	•
	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:	
	<ul> <li>Communication issue between a device and Panel Server when available from the end devices</li> </ul>	
	<ul> <li>Alarm associated to ERMS on circuit breaker</li> </ul>	
	<ul> <li>The three levels of alarms from HeatTag sensors</li> </ul>	
	<ul> <li>Alarms associated to Breaker I/O device connected downstream to an I/O Smart Link gateway</li> </ul>	
	<ul> <li>Communication loss alarm for wireless device connected downstream to a child gateway.</li> </ul>	
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	

# **Maximum Configuration**

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

Device type		Maximum concurrent number of devices				
Wireless device (not supported	PowerTag Energy sensors	85				
PAS600LWD and PAS600PWD)	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 <sub>2</sub> sensors	100				
	Wireless temperature and humidity sensors	100				
	PowerTag A devices	100				
	PowerTag Ambient sensors	100				
	Easergy TH110/CL110 environmental 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.					
	<ul> <li>The total number of PowerTag Control, PowerLogic HeatTag, PowerLogic PD100, MasterPacT MTZ, and Exiway Link devices should not exceed 20 devices.</li> </ul>					
Modbus-SL devices	Modbus-SL devices other than I/O devices:	32 <b>NOTE:</b> The maximum number				
		depends on the serial line length and the type of device(s)				
	<ul> <li>I/O devices:</li> <li>I/O Smart Link device</li> <li>Acti9 Smartlink Modbus-SL device</li> <li>SmartLink SIB gateway</li> </ul>	<ul> <li>8 I/O Smart Link or Acti9 Smartlink Modbus-SL devices connected to Panel Server serial line</li> <li>OR 1 SmartLink SIB + 7 I/O Smart Link or Acti9 Smartlink Modbus-SI</li> </ul>				
		devices OR 8 Smartl ink 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 <b>NOTE:</b> 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 Universal in firmware version 002.002.000.

#### Not available

Commissioning and monitorin	Availability	
Modbus serial communication	Commissioning of feature to use the Modbus serial port in reverse mode by using Panel Server webpages	•
Digital inputs (PAS600L, PAS600LWD)	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 <b>I/O contextualization</b> 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	•
	Selective discovery of wireless devices by using EcoStruxure Power Commission software	•
	Selective discovery of wireless devices by using Panel Server webpages	
	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 18) by using Panel Server webpages	•
	Diagnostic by using Panel Server webpages	•

Available

# **Supported Devices**

# **Wireless Devices**

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

Device family	Device		Minimum Panel Server Universal 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 <sup>1</sup>
Power meter	PowerTag A9 M63 3P+N Top	A9MEM1541	001.003.002	004.000.424 <sup>1</sup>
Power meter	PowerTag A9 M63 3P+N Bottom	A9MEM1542	001.003.002	004.000.424 <sup>1</sup>
Power meter	PowerTag A9 M63 3P	A9MEM1543	001.003.002	004.000.424 <sup>1</sup>
Power meter	PowerTag M250 3P 250A	LV434020	001.003.002	001.003.002 <sup>1</sup>
Power meter	PowerTag M250 3P+N 250A	LV434021	001.003.002	001.003.002 <sup>1</sup>
Power meter	PowerTag M630 3P 630A	LV434022	001.003.002	001.003.002 <sup>1</sup>
Power meter	PowerTag M630 3P+N 630A	LV434023	001.003.002	001.003.002 <sup>1</sup>
Power meter	PowerTag A9 M63 1P+W	A9MEM1520	001.003.002	004.000.424 <sup>1</sup>
Power meter	PowerTag A9 M63 1P+N Top	A9MEM1521	001.003.002	004.000.424 <sup>1</sup>
Power meter	PowerTag A9 P63 1P+N Top	A9MEM1560	001.003.002	004.000.424 <sup>1</sup>
Power meter	PowerTag A9 P63 1P+N Top	A9MEM1561	001.003.002	004.000.424 <sup>1</sup>
Power meter	PowerTag A9 P63 1P+N Bottom	A9MEM1562	001.003.002	004.000.424 <sup>1</sup>
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 <sup>1</sup>
Power meter	PowerTag A9 F63 3P+N	A9MEM1570	001.003.002	004.000.424 <sup>1</sup>
Power meter	PowerTag A9 P63 3P+N Top	A9MEM1571	001.003.002	004.000.424 <sup>1</sup>
Power meter	PowerTag A9 P63 3P+N Bottom	A9MEM1572	001.003.002	004.000.424 <sup>1</sup>
Power meter	PowerTag A9 F63 3P	A9MEM1573	001.003.002	004.000.424 <sup>1</sup>
Power meter	PowerTag A9 F63 3P+N 110/230V	A9MEM1574	001.003.002	004.000.424 <sup>1</sup>
Power meter	PowerTag F160 3P/3P+N	A9MEM1580	001.003.002	001.001.000 <sup>1</sup>
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
Power meter	PowerLogic Tag E-Frame 10- 60A 2P	PLTE602P	001.003.002	004.000.424 1

<sup>1.</sup> Modbus mapping identical to PowerTag Link

Device family	Device		Minimum Panel Server Universal firmware version	Minimum firmware version of wireless device
Power meter	PowerLogic Tag E-Frame 10- 60A 3P	PLTE603P	001.003.002	004.000.424 <sup>2</sup>
Power meter	PowerLogic Tag QO 10-30A 1P+N	PLTQO301P	001.003.002	004.000.424 <sup>2</sup>
Power meter	PowerLogic Tag QO 10-30A 2P	PLTQO302P	001.003.002	004.000.424 <sup>2</sup>
Power meter	PowerLogic Tag QO 10-30A 3P	PLTQO303P	001.003.002	004.000.424 <sup>2</sup>
Power meter	PowerLogic Tag QO 35-60A 1P+N	PLTQO601P	001.003.002	004.000.424 <sup>2</sup>
Power meter	PowerLogic Tag QO 35-60A 2P	PLTQO602P	001.003.002	004.000.424 <sup>2</sup>
Power meter	PowerLogic Tag QO 35-60A 3P	PLTQO603P	001.003.002	004.000.424 <sup>2</sup>
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	Easergy TH110 wireless thermal sensor	EMS59440	001.003.002	001.000.003 <sup>2</sup>
Ambient sensor	Easergy CL110 wireless environmental sensor	EMS59443	001.003.002	002.001.003 <sup>2</sup>
Ambient sensor	ZBRTT1 wireless environmental sensor	ZBRTT1	001.003.002	002.001.003 <sup>2</sup>
Ambient sensor	Wireless CO <sub>2</sub> 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 A (EwSenseTemp)	ESST010B0400	001.003.002	001.001.004
Ambient sensor	PowerTag Ambient wireless temperature sensor	A9XST114	001.003.002	001.001.005
Ambient sensor	PowerLogic HeatTag	SMT10020	001.003.002	002.002.009
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 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
L	1	1		1

<sup>2.</sup> Modbus mapping identical to PowerTag Link

Device family	Device		Minimum Panel Server Universal firmware version	Minimum firmware version of wireless device		
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 NSX 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	ZBRT1	002.002.000	001.000.000		
	and batteryless pushbutton <sup>3</sup>	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		
	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		

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

Device family	Device		Minimum Panel Server Universal firmware version	Minimum firmware version of wireless device
	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 Universal firmware version required to enable Ethernet communication with devices for real-time measurement monitoring in Panel Server webpages.

Device family	Device		Minimum Panel Server Universal 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 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		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 Universal for real-time measurement monitoring in Panel Server webpages.

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 MasterPacT MTZ MasterPacT NT/NW ComPacT NS ComPacT NSX	Trip unit	Connected to										
		IFE Ethernet in	nterface	IFE Ethernet s server	switchboard	elFE embedded Ethernet interface						
		LV434010	LV434001	LV434011	LV434002	LV851001						
MasterPacT MTZ	MicroLogic 2.0 X	Y	Y	Y	Y	Y						
	MicroLogic 3.0 X	N	Ν	N	N	Y						
	MicroLogic 5.0 X	N	N	Ν	Ν	Y						
	MicroLogic 6.0 X	Y	Y	Υ	Y	Y						
	MicroLogic 7.0 X	Ν	Ν	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	Ν	Ν	Ν	Ν	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 Universal 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 Universal 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	PowerLogic EM3550A energy meter							
Power meter	PowerLogic EM3555 power and energy me	001.003.002							
Power meter	PowerLogic EM3555A energy meter		001.003.002						
Power meter	PowerLogic EM4200 Enercept power and e	nergy 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	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 PM2230 meter	METSEPM2230D	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						
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	1	001.003.002						
Power meter	PowerLogic PM3255 power meter		001.003.002						

Device family	Device		Minimum Panel Server Universal firmware version					
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	PowerLogic PM5563 power meter						
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 <sup>4</sup>	IMD-IM20	001.005.001					
Insulation monitoring	Vigilohm IM20H insulation monitoring device <sup>4</sup>	IMD-IM20-H	001.005.001					
Insulation monitoring	Vigilohm IM400 insulation monitoring device <sup>4</sup>	IMD-IM400	001.005.001					
Insulation monitoring	Vigilohm IM400C insulation monitoring device <sup>4</sup>	IMD-IM400C	001.005.001					
Insulation monitoring	Vigilohm IM400L insulation monitoring device <sup>4</sup>	IMDIM400L	001.005.001					
Insulation monitoring	Vigilohm IM400N insulation monitoring device <sup>4</sup>	IMDIM400N	001.005.001					
Insulation monitoring	Vigilohm IM400LTHR insulation monitoring device <sup>4</sup>	IMDIM400LTHR	001.005.001					
Insulation monitoring	Vigilohm IM400THR insulation monitoring device <sup>4</sup>	IMDIM400THR	001.005.001					
Insulation monitoring	Vigilohm IM400THRN insulation monitoring device <sup>4</sup>	IMDIM400THRN	001.005.001					
Insulation monitoring	Vigilohm IMDIFL12MCT insulation fault loca	tor <sup>4</sup>	001.005.001					

<sup>4.</sup> Device integrated only for data publication not for alarms

# **Circuit Breakers and Associated Trip Units**

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

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 inter	ace	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	Ν	N/A						
MasterPacT NT/NW	MicroLogic 2.0 A	Ν	Ν	N/A						
	MicroLogic 3.0 A	Ν	Ν	N/A						
	MicroLogic 5.0 A	Ν	Ν	N/A						
	MicroLogic 6.0 A	Ν	Ν	N/A						
	MicroLogic 7.0 A	Y	Y	N/A						
	MicroLogic 2.0 E	Ν	N	N/A						
	MicroLogic 5.0 E	Ν	Ν	N/A						
	MicroLogic 6.0 E	Ν	N	N/A						
	MicroLogic 5.0 P	Y	Y	N/A						
	MicroLogic 6.0 P	Υ	Y	N/A						
ComPacT NS	MicroLogic 7.0 A	Y	Y	N/A						
	MicroLogic 7.0 H	Ν	Ν	N/A						
ComPacT NSX	MicroLogic 5.2 A	Ν	Ν	Υ						
	MicroLogic 6.2 A	Υ	Y	Υ						
	MicroLogic 5.2 E	Υ	Y	Y						
	MicroLogic 6.2 E	Υ	Υ	Υ						
	MicroLogic 7.2 E	Υ	Y	Υ						
	MicroLogic 5.3 E	Υ	Y	Y						
	MicroLogic 6.3 E	Ν	Ν	Υ						
	MicroLogic 7.3 E	Υ	Y	Υ						
PowerPacT H-, J-, and L-frame	MicroLogic 5.2 A	Ν	Ν	Y						
	MicroLogic 5.3 A	Ν	Ν	Y						
	MicroLogic 6.2 A	Ν	Ν	Y						
	MicroLogic 5.2 E	N	Ν	Y						
	MicroLogic 6.2 E	Ν	Ν	Y						

Circuit breaker	Trip unit	Connected to					
		IFM Modbus-SL interf	BSCM Modbus SL/ULP Module				
		TVR00210	LV434000	LV434220			
	MicroLogic 7.2 E	Ν	Ν	Y			
	MicroLogic 5.3 E	Ν	Ν	Y			
	MicroLogic 6.3 E	Ν	Ν	Y			
	MicroLogic 7.3 E	Ν	Ν	Y			

# **Appendix: Previous Firmware Versions**

# Firmware Version 002.001.000

# New Features for Version 002.001.000

- New model PAS600P released with hardware version 002.000.000
  - Support for the following commands from cloud to Exiway Link devices
  - $\,\circ\,\,$  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

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.

# 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.

### 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
002.002.000	27 January 2026
002.001.000	24 November 2025
002.000.000	22 May 2025

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.

### **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.
  - 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

- 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 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	!	#	\$	%	&	6	*	+	,	-	•	=	?	@	١	^	_	Ι	~

• 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.

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 23
- Modbus Serial Devices Circuit Breakers and Associated Trip Units connected via IFM interface or BSCM Modbus SL/ULP module, page 26

**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 Monitoring & Control webpage
  - 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<sup>3</sup>)
  - Steam flow (m<sup>3</sup>/s)
  - Steam mass flow (kg/s)
  - Air volume (m<sup>3</sup>)
  - Air flow (m<sup>3</sup>/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:
    - 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.

### 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
002.002.000	27 January 2026
002.001.000	24 November 2025
002.000.000	22 May 2025

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.
- When SFTP or HTTPS publication is enabled, alarms are displayed in the Panel Server webpages but are not published on SFTP or HTTPS servers.
- 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.

### **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

- 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 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	!	#	\$	%	&	6	*	+	,	-	•	=	?	@	١	^	-	—	~

 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.

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 23
- Modbus Serial Devices Circuit Breakers and Associated Trip Units connected via IFM interface or BSCM Modbus SL/ULP module, page 26

**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 autodiagnostic 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
  - 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.
- When SFTP or HTTPS publication is enabled, alarms are displayed in the Panel Server webpages but are not published on SFTP or HTTPS servers.
- 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.

#### **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

- 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.

#### **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	!	#	\$	%	&	1	*	+	,	-	•	=	?	@	١	۸	-		~

• 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.

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 23
- Modbus Serial Devices Circuit Breakers and Associated Trip Units connected via IFM interface, page 26

# Firmware Version 001.009.000

#### **New Features**

- When data publication is activated by any method, the last month of sampled data is published by the method selected.
- Introduction of two new Wired by Design models (PAS600LWD and PAS600PWD). These models have no native wireless chipset preventing the use of Wi-Fi communication and connection to IEEE 802.15.4 wireless devices.
- 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:
      - $\checkmark$  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 **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.

#### **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.
- When SFTP publication is enabled, alarms are displayed in the Panel Server webpages but are not published on SFTP Server.
- 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 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

- 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.

#### **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.

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 23
- Modbus Serial Devices Circuit Breakers and Associated Trip Units connected via IFM interface, page 26

# Firmware Version 001.008.000

### **New Features**

- 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:
  - **Monitoring and Control** menu: all digits of energy data values are displayed (scientific notation no longer used)

- 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.
- · Web browser Mozilla Firefox not supported
- · General performance and limitations:
  - 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 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.
- 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.
  - 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
- 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:
  - 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 Monitorin Power Operation,EcoStruxure Building Operation, any Buil System, or third-party monitoring or supervision system)	•	
	Ability to disable concurrently and permanently the wireless 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	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 <sub>2</sub> sensors	40	

General features			Availability
	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:		
	<ul> <li>Any combination of wireless devices listed in the table exceed 40 devices.</li> </ul>	e above must not	
	<ul> <li>The total number of PowerTag Control, PowerLogic F PowerLogic PD100 should not exceed 20 devices.</li> </ul>	leatTag, and	
Modbus TCP/IP communication	128 Modbus TCP/IP devices maximum including devices p the Panel Server and virtual devices (that is, IEEE 802.15. a child Panel Server gateway)	hysically connected to 4 devices connected to	•
Human Machine Interface	FDM128 Ethernet display		
	PowerTag Link display		•
Configuration	User management by single user account		
	User management by multiple users with Role-Based Acce	ess Control (RBAC)	•
Alarms	In general, publication of alarms supported by the end		
	Publication of alarms related to the following:		
	<ul> <li>Communication issue between a device and Pan available from the end devices</li> </ul>	el Server when	
	<ul> <li>Alarm associated to ERMS on circuit breaker</li> </ul>		
	<ul> <li>The three levels of alarms from HeatTag sensors</li> </ul>		
	<ul> <li>Alarms associated to Breaker I/O device connec I/O Smart Link gateway</li> </ul>	ted downstream to an	
	<ul> <li>Communication loss alarm for wireless device co to a child gateway.</li> </ul>	nnected downstream	
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 Se	rver 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 monitorin	Commissioning and monitoring features				
Modbus serial communication	Commissioning of feature to use the Modbus serial port in reverse mode by using Panel Server webpages	•			
Digital inputs (PAS600L)	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 <b>IO status</b> 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 18) by using Panel Server webpages	•			
	Diagnostic by using Panel Server webpages	•			

- · Performance and limitations on Panel Server Universal:
  - 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 128 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.
  - 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 sampling and publishing for Schneider Electric cloud applications:
  - 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 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 Universal.
- 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.
  - 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**

- 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 Universal 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	•
	External Wi-Fi antenna (reference: PASA-ANT1)	•
IEEE 802.15.4 communication	Maximum number of wireless devices:	•
	<ul> <li>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<sub>2</sub> 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</li> </ul>	
	or up to 85 Easergy TH110/CL110 environmental sensors	
	<b>NOTE:</b> 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	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	<ul> <li>In general, publication of alarms supported by the end devices.</li> <li>Publication of alarms related to:         <ul> <li>Communication issue between a device and Panel Server when available from the end devices</li> <li>ERMS on circuit breaker</li> <li>The three levels of alarms from HeatTag sensors</li> </ul> </li> </ul>	•
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	•

## **Commissioning and Monitoring Features**

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

- Available
- Not available

Commissioning and monitorin	Availability	
Modbus serial communication	Commissioning of feature to use the Modbus serial port in reverse mode by using Panel Server webpages	•
Digital inputs (PAS600L)	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 <b>IO status</b> 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 18) by using Panel Server webpages	•
	Diagnostic by using Panel Server webpages	•

- · Performance and limitations on Panel Server Universal:
  - 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 sampling and publishing for Schneider Electric cloud applications:
  - 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 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 Universal.

- 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*).
- Publication to SFTP server of data sampled on devices connected to the Panel Server, including authentication to SFTP server with 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 EcoStruxure Panel Server Universal 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	<ul> <li>Maximum number of wireless devices:</li> <li>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<sub>2</sub> sensors, wireless temperature and humidity sensors, PowerTag A, PowerTag Ambient, Easergy TH110/CL110 environmental sensors, and PowerLogic HeatTag sensors</li> <li>or up to 65 Easergy TH110/CL110 environmental sensors</li> </ul>	•
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	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	<ul> <li>Publication of alarms related to:</li> <li>Communication issue between a device and Panel Server when available from the end devices</li> <li>ERMS on circuit breaker</li> <li>The three levels of alarms from HeatTag sensors</li> </ul>	•
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	•

## **Commissioning and Monitoring Features**

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

#### Available

#### Not available

Commissioning and n	Availability	
Modbus serial communication	Commissioning of feature to use the Modbus serial port in reverse mode by using Panel Server webpages	•
Digital inputs (PAS600L)	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 18) by using Panel Server webpages	•
	Diagnostic by using Panel Server webpages	

- · Performance and limitations on Panel Server Universal:
  - 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 sampling and publishing for cloud applications:
  - 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 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.



- 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.
- 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 EcoStruxure Panel Server Universal 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	<ul> <li>Maximum number of wireless devices:</li> <li>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<sub>2</sub> 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</li> <li>or up to 65 Easergy TH110/CL110 environmental environmental</li> </ul>	•	
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	FDM128 Ethernet display	•	
Interface (FIVII)	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	<ul> <li>Publication of alarms related to:</li> <li>Communication issue between a device and Panel Server when available from the end devices</li> <li>ERMS on circuit breaker</li> <li>The three levels of alarms from HeatTag sensors</li> </ul>	•	
Protocols	Modbus TCP/IP server		
	Modbus TCP/IP client	•	
	DHCP client	•	
	DHCP server	•	
	DPWS server	•	
	HTTPS		

## **Commissioning and Monitoring Features**

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

- Available
- Not available

Commissioning and n	Availability	
Modbus serial communication	Commissioning of feature to use the Modbus serial port in reverse mode by using Panel Server webpages	•
Digital inputs (PAS600L)	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 18) by using Panel Server webpages	•
	Diagnostic by using Panel Server webpages	•
Data export	Publication on Schneider Electric cloud by using Panel Server webpages	•

- · Performance and limitations on Panel Server Universal:
  - No data publication on an SFTP server.
  - 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 sampling and publishing for cloud applications:
  - 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 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.
  - No control of Smartlink Modbus by using Panel Server webpages.
  - No publication of Smartlink Modbus data to the cloud applications.
- Limitations on wireless devices: PowerTag Control and PowerTag Display are not supported by Panel Server Universal.

# Firmware Version 001.004.000

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### New Features

- Connection to EcoStruxure cloud applications:
  - EcoStruxure Facility Expert Energy 0
  - EcoStruxure Energy Hub 0
- 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 Panel Server (PAS#2) is connected to one Ethernet port of the parent/upstream gateway. For more information, refer to DOCA0172EN EcoStruxure Panel Server - User Guide.







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

### **Known Issues**

No known issues.

#### **Features**

The following table presents the availability of features on EcoStruxure Panel Server Universal 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 18).	
Wi-Fi	2.4 GHz	
	External Wi-Fi antenna (reference: PASA-ANT1)	•
IEEE 802.15.4	Maximum number of wireless devices:	
communication	<ul> <li>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<sub>2</sub> 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.</li> </ul>	
	or up to 65 environmental sensors Easergy TH110/ CL110	
Digital inputs (PAS600L)	Commissioning with EcoStruxure Power Commission software	•
	Commissioning with Panel Server webpages	•
	Monitoring with EcoStruxure Power Commission software and EcoStruxure Panel Server webpages	•
Human Machine	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 on Panel Server Universal:
  - 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 in EcoStruxure 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 sampling and publishing for cloud applications:
  - The number of individual data points that can be sampled is limited to 2000.
- Limitations on Smartlink Modbus:
  - Commissioning through EcoStruxure Power Commission software, not through EcoStruxure 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 Panel Server webpages.
  - No control of Smartlink Modbus through Panel Server webpages.
- Limitations on wireless devices: PowerTag Control are not supported by Panel Server Universal.

# 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.

### **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:
  - 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.
  - 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.

#### **Features**

The following table presents the availability of features on EcoStruxure Panel Server Universal 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 18).	•
Wi-Fi	2.4 GHz	
	External Wi-Fi antenna (reference: PASA-ANT1)	
IEEE 802.15.4 communication	<ul> <li>Maximum number of wireless devices:</li> <li>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<sub>2</sub> sensors, wireless temperature and humidity sensors, PowerTag A, PowerTag Ambient, environmental sensors Easergy TH110/CL110, and PowerLogic HeatTag sensors, with a maximum of:         <ul> <li>20 PowerTag or PowerLogic Tag energy sensors, or Acti9 Active</li> <li>3 PowerLogic HeatTag</li> <li>6 wireless indication auxiliaries for ComPacT and PowerPacT circuit breakers</li> </ul> </li> <li>or up to 65 environmental sensors Easergy TH110/ CL110</li> </ul>	
Digital inputs (PAS600L)	Commissioning with EcoStruxure Power Commission software	•
	Commissioning with Panel Server webpages	•
	Monitoring with EcoStruxure Power Commission software and EcoStruxure Panel Server webpages	•
Human Machine	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	

Features	Availability	
Configuration	EcoStruxure Power Commission software	٠
	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 on Panel Server Universal:
  - Function to backup and restore Panel Server configuration not available.
  - Alarms not set in EcoStruxure 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 EcoStruxure 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 Panel Server webpages.
  - No control of Smartlink Modbus through Panel Server webpages.
- Limitations on wireless devices: PowerTag Control are not supported by Panel Server Universal.

# Firmware Version 001.003.001

### **New Features**

- Addition of EcoStruxure Panel Server webpages for monitoring
- Enhancement of response time to Modbus TCP/IP request and operation for a wireless IEEE 802.15.4 device
- Addition of 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).
- 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*.



- Integration with Schneider Electric cloud applications EcoStruxure Asset Advisor, EcoStruxure Resource Advisor, and EcoStruxure Energy Hub with limited features. For more information, contact your local Schneider Electric representative.
- Ethernet diagnostics to help with validating the Panel Server integration into upstream communication.
- New languages supported in EcoStruxure Panel Server webpages: Italian, Spanish, German, Russian.
- For wireless devices, configuration of communication period per family (energy, ambient, control) on EcoStruxure 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 EcoStruxure 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.

#### **Issues Fixed**

All known issues in firmware version 001.002.000 are fixed.

#### **Features**

The following table presents the availability of features on EcoStruxure Panel Server Universal 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 18).	•
Wi-Fi	2.4 GHz	•
	External Wi-Fi antenna (reference: PASA-ANT1)	•
IEEE 802.15.4	Maximum number of wireless devices:	•
communication	<ul> <li>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<sub>2</sub> sensors, wireless temperature and humidity sensors, PowerTag A, PowerTag Ambient, environmental sensors Easergy TH110/CL110, and PowerLogic HeatTag sensors, with a maximum of:</li> </ul>	
	<ul> <li>20 PowerTag or PowerLogic Tag energy sensors, or Acti9 Active</li> </ul>	
	3 PowerLogic HeatTag	
	<ul> <li>6 Wireless indication auxiliaries for ComPac I and PowerPacT circuit breakers</li> </ul>	
	<ul> <li>or up to 65 environmental sensors Easergy TH110/ CL110</li> </ul>	
Digital inputs (PAS600L)	Commissioning with EcoStruxure Power Commission software	•
	Commissioning with EcoStruxure Panel Server webpages	•
	Monitoring with EcoStruxure Power Commission software and EcoStruxure Panel Server webpages	•
Human Machine	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)	•
Features		Availability
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Protocols	Modbus TCP/IP server	•
	Modbus TCP/IP client	•
	DHCP client	•
	DHCP server	•
	DPWS	•
	HTTPS	

### **Performance and Limitations**

- Performance and limitations on EcoStruxure Panel Server Universal:
  - Function to backup and restore Panel Server configuration not available.
  - Alarms not set and not displayed in EcoStruxure 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 EcoStruxure Panel Server webpages.
  - Status of Smartlink Modbus inputs/outputs or counter available from the Modbus registers, not displayed on EcoStruxure Panel Server webpages.
  - Alarms not displayed in EcoStruxure Panel Server webpages.
  - No control of Smartlink Modbus through EcoStruxure Panel Server webpages.
- Limitations on wireless devices: PowerTag Control are not supported by EcoStruxure Panel Server Universal.

# Firmware Version 001.002.000

### **New Features**

- Addition of supported devices:
  - HeatTag sensors
  - Wireless indication auxiliaries for ComPacT and PowerPacT circuit breakers
  - PowerLogic Tag 2P energy sensors
  - Wireless CO<sub>2</sub> sensors
- Wireless temperature and humidity sensors
- PowerTag A (EwSenseTemp) sensor
- PowerTag Ambient wireless temperature sensors
- Addition of separated network topology
- Addition of Modbus TCP/IP client protocol
- Addition of digital inputs to monitor the state of external contacts or as pulse counter
- Addition of EcoStruxure Panel Server webpages for monitoring
- Enhancement of typical response time to Modbus/TCP IP request for a wireless IEEE 802.15.4 device
- Enhancement of maximum response time to Modbus/TCP IP request for a wireless IEEE 802.15.4 device

### **Known Issues**

• The separated mode is configured to segregate downstream Modbus TCP/IP devices connected on **ETH1** port from upstream communication systems connected on **ETH2** port. With the current firmware version, it is only possible to access the downstream Modbus TCP/IP devices data from the EcoStruxure Panel Server embedded webpages. A monitoring software connected on **ETH1** port using Modbus TCP/IP will not be able to access the Modbus TCP/IP devices connected on **ETH1** port using Modbus TCP/IP will not be able to access the Modbus TCP/IP devices connected on **ETH2** port. For such applications, use only the switched mode.

 When an active alarm is present (as reported in the Modbus register) for a PowerTag Energy M250/M630 for ComPacT NSX 3-pole circuit breaker, a PowerTag Energy F160, a PowerTag Rope, or a PowerLogic Tag Rope (see commercial references in the table below), the alarm is still active although the value of the ENVT (External Neutral Voltage Tap) setting is changed by using the EcoStruxure Panel Server webpages or EcoStruxure Power Commission software.

To work around this issue, restart the EcoStruxure Panel Server Universal (see DOCA0172EN *EcoStruxure Panel Server - User Guide* for detailed procedure).

The alarm for phase-to-neutral voltage protection is one of the following:

- 80% Undervoltage on phase-to-neutral
- 120% Overvoltage on phase-to-neutral

The following table lists the devices concerned by the issue:

Devices	Commercial reference
PowerTag M250 3P 250A	LV434020
PowerTag M250 3P+N 250A	LV434021
PowerTag M630 3P 630A	LV434022
PowerTag M630 3P+N 630A	LV434023
PowerTag F160 3P/3P+N	A9MEM1580
PowerTag Rope 200 A 3P/3P+N	A9MEM1590
PowerTag Rope 600 A 3P/3P+N	A9MEM1591
PowerTag Rope 1000 A 3P/3P+N	A9MEM1592
PowerTag Rope 2000 A 3P/3P+N	A9MEM1593
PowerLogic Tag Rope 120A 3P	PLTR1203P
PowerLogic Tag Rope 600A 3P	PLTR6003P
PowerLogic Tag Rope 1000A 3P	PLTR10003P
PowerLogic Tag Rope 2000A 3P	PLTR20003P

• When an active alarm is present (as reported in the Modbus register) for a PowerTag Energy 1P+N, a PowerLogic Tag 1 P or 2P, or an Acti9 Active iC40 or iC60, the alarm is still active although the value of the **Phase Sequence** setting is changed by using the EcoStruxure Panel Server webpages or EcoStruxure Power Commission software.

To work around this issue, restart the EcoStruxure Panel Server Universal (see DOCA0172EN *EcoStruxure Panel Server - User Guide* for detailed procedure).

The alarm about phase sequence is one of the following:

- 80% Undervoltage
- 120% Overvoltage
- Overcurrent over 45%, 50%, or 80% of nominal current
- Load current is 0 A

The following table lists the devices concerned by the issue:

Devices	Commercial reference
PowerTag A9 P63 1P+N Top	A9MEM1560
PowerTag A9 P63 1P+N Top	A9MEM1561
PowerTag A9 P63 1P+N Bottom	A9MEM1562
PowerTag A9 P63 1P+N Bottom RCBO	A9MEM1563
PowerTag A9 F63 1P+N 110V	A9MEM1564
PowerLogic Tag QO 10-30A 1P+N	PLTQO301P
PowerLogic Tag QO 35-60A 1P+N	PLTQO601P
PowerLogic Tag E-Frame 10-60A 1P+N	PLTE601P
PowerLogic Tag QO 10-30A 2P	PLTQO302P
PowerLogic Tag QO 35-60A 2P	PLTQO602P
PowerLogic Tag E-Frame 10-60A 2P	PLTE602P
Acti9 Active iC40 and iC60	A9TAA, A9TAB, A9TDEC, A9TDFC, A9TDFD, A9TPDD, A9TPED, A9TYAE, A9TYBE

 On systems with both Modbus devices and wireless devices, the table view of measurements may display in some rare cases the same measurements value for the wireless devices as for the Modbus device as shown below:

Device name	$\uparrow$	/g (A)	$\uparrow$	Current A (A)	$\uparrow$	Current B (A)	$\uparrow$	Current C (A)	$\uparrow$	Curr
F63 3P+N		.011		4.011		4.011		4.014		
PM5560		.011		4.011		4.011		4.014		

This issue is only within this page and does not affect the measurements reported on the Modbus register to the upstream system nor the measurements reported in the single device webpage.

This issue does not affect systems with only wireless devices or only Modbus devices.

Follow this procedure to resolve the issue:

- For systems with more wireless devices than Modbus devices (for example, 10 wireless devices and 5 Modbus devices):
- 1. Remove all devices from the project.
- 2. Add all Modbus devices.
- 3. Add all wireless devices.
- 4. Remove the wireless devices only again.
- 5. Add all the wireless devices again.
- For systems with more Modbus devices than wireless devices (for example, 10 Modbus devices and 5 wireless devices):
- 1. Remove all devices from the project.
- 2. Add all wireless devices.
- 3. Add all Modbus devices.
- 4. Remove the Modbus devices only again.
- 5. Add all the Modbus devices.
- For systems with same number of Modbus devices as wireless devices (for example, 5 Modbus devices and 5 wireless devices):
  - 1. Remove all devices from the project.
  - 2. Add all wireless devices.
  - 3. Add all Modbus devices.
  - 4. Remove the Modbus devices only again.
  - 5. Add all the Modbus devices.

#### **Features**

The following table presents the availability of features on EcoStruxure Panel Server Universal in firmware version 001.002.000.

- 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 chapter Supported Devices, page 18).	•
Wi-Fi	2.4 GHz	•
	5 GHz	•
	External Wi-Fi antenna	•
IEEE 802.15.4 communication	<ul> <li>Maximum number of wireless devices:</li> <li>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<sub>2</sub> sensors, wireless temperature and humidity sensors, PowerTag A, PowerTag Ambient, environmental sensors Easergy TH110/CL110, and PowerLogic HeatTag sensors, with a maximum of:         <ul> <li>20 PowerTag or PowerLogic Tag energy sensors, or Acti9 Active</li> <li>3 PowerLogic HeatTag</li> <li>6 wireless indication auxiliaries for ComPacT and PowerPacT circuit breakers</li> <li>or up to 65 environmental sensors Easergy TH110/ CL110</li> </ul> </li> </ul>	•
Digital inputs		•
Configuration	EcoStruxure Power Commission software	•
	Embedded webpages for configuration of Ethernet and Modbus settings	•
	User management: single user	•
Protocols	Modbus TCP/IP server	•
	Modbus TCP/IP client	
	DHCP client	
	DHCP server	
	DPWS	
	HTTPS	

## **Performances and Limitations**

- 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 EcoStruxure Panel Server latency between Modbus TCP/IP request forwarded to the Modbus RS485 network is 10 ms.
- The maximum number of Modbus/TCP concurrent connections is 32.

# Firmware Version 001.001.000

# Description

Firmware initial version for EcoStruxure Panel Server Universal.

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As standards, specifications, and design change from time to time, please ask for confirmation of the information given in this publication.

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