TeSys Active

TeSys Tera Motor Management System

DTM Library Software Release Notes

Schneider Electric

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Safety Information

Important Information

Read these instructions carefully, and look at the equipment to become familiar with the device before trying to install, operate, service, or maintain it. The following special messages may appear throughout this documentation or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.

The addition of this symbol to a "Danger" or "Warning" safety label indicates that an electrical hazard exists which will result in personal injury if the instructions are not followed.

This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

⚠ DANGER
DANGER indicates a hazardous situation which, if not avoided, **will result in** death or serious injury.

⚠ WARNING
WARNING indicates a hazardous situation which, if not avoided, **could result in** death or serious injury.

⚠ CAUTION
CAUTION indicates a hazardous situation which, if not avoided, **could result** in minor or moderate injury.

NOTICE
NOTICE is used to address practices not related to physical injury.

Please Note

Electrical equipment should be installed, operated, serviced, and maintained only by qualified personnel. No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this material.

A qualified person is one who has skills and knowledge related to the construction and operation of electrical equipment and its installation, and has received safety training to recognize and avoid the hazards involved.

About the Document

Document Scope

This document provides the version history of TeSys Tera DTM Library for the TeSys Tera system.

Validity Note

This document is valid only for the TeSys Tera DTM Library with the TeSys Tera system.

General Cybersecurity Information

In recent years, the growing number of networked machines and production plants has seen a corresponding increase in the potential for cyber threats, such as unauthorized access, data breaches, and operational disruptions. You must, therefore, consider all possible cybersecurity measures to help protect assets and systems against such threats.

To help keep your Schneider Electric products secure and protected, it is in your best interest to implement the cybersecurity best practices as described in the Cybersecurity Best Practices document.

Schneider Electric provides additional information and assistance:

- Subscribe to the Schneider Electric security newsletter.
- Visit the Cybersecurity Support Portal web page to:
  - Find Security Notifications.
  - Report vulnerabilities and incidents.
- Visit the Schneider Electric Cybersecurity and Data Protection Posture web page to:
  - Access the cybersecurity posture.
  - Learn more about cybersecurity in the cybersecurity academy.
  - Explore the cybersecurity services from Schneider Electric.

Environmental Data

For product compliance and environmental information, refer to the Schneider Electric Environmental Data Program.

Available Languages of the Document

The document is available in these languages:

- English
- Chinese
- French
- German
- Italian
- Korean
- Spanish

Online Information

The information contained in this document is likely to be updated at any time. Schneider Electric strongly recommends that you have the most recent and up-to-date version available on www.se.com/ww/en/download/.

The technical specifications of the devices described in the present document also appear online. To access the information online, go to the Schneider Electric home page.

Related Documents

Title of documentation	Description	Reference number
TeSys Tera Motor Management System User Guide	This is the main user guide that introduces the complete TeSys Tera system. It describes the main functions of the LTMT main units, LTMTCT/LTMTCTV sensor modules, LTMT expansion modules, and LTMTCUF control operator unit.	DOCA0257EN
TeSys Tera Motor Management System Installation Guide	This guide describes the installation, commissioning, and maintenance of the LTMT main units, LTMTCT/LTMTCTV sensor modules, LTMT expansion modules, and LTMTCUF control operator unit.	DOCA0356EN
TeSys Tera Motor Management System Modbus RTU Communication Guide	This guide describes the Modbus network protocol communication of the LTMT main units.	DOCA0355EN
TeSys Tera Motor Management System PROFIBUS DP Guide	This guide describes the PROFIBUS DP network protocol communication of the LTMT main unit.	DOCA0256EN
TeSys Tera Motor Management System LTMTCUF control operator unit User Guide	This guide describes how to install, configure, and use the LTMTCUF control operator unit.	DOCA0233EN
TeSys Tera Motor Management System DTM library Online Help Guide	This online help provides the summary of the TeSys Tera DTM library which allows the customization of the functions of the TeSys Tera Motor Management System .	DOCA0275EN
TeSys Tera Motor Management System Firmware Release Notes	This guide provides important information about the TeSys Tera system firmware packages and provides summary of new features and enhancement.	DOCA0276EN
TeSys Tera Motor Management System EtherNet/IP Guide	This guide describes the EtherNet/IP network protocol communication of the LTMT main unit.	DOCA0258EN
TeSys Tera Motor Management System Cybersecurity Guide	This guide provides information on cybersecurity aspects for the TeSys Tera Motor Management System. This guide addresses on how to secure your operational technology network, or your company serial or Ethernet network.	DOCA0260EN

You can download these technical publications and other technical information from our website at www.se.com.

# Information on Non-Inclusive or Insensitive Terminology

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Introduction

The TeSys Tera system is designed as a reliable building block for Intelligent Motor Control Centres (iMCCs) to provide complete protection, metering, control, and monitoring capabilities for single-phase or three-phase AC induction motors. The system is installed in the low voltage switchgear system and connects the higher level automation system through fieldbus network and the motor feeder.
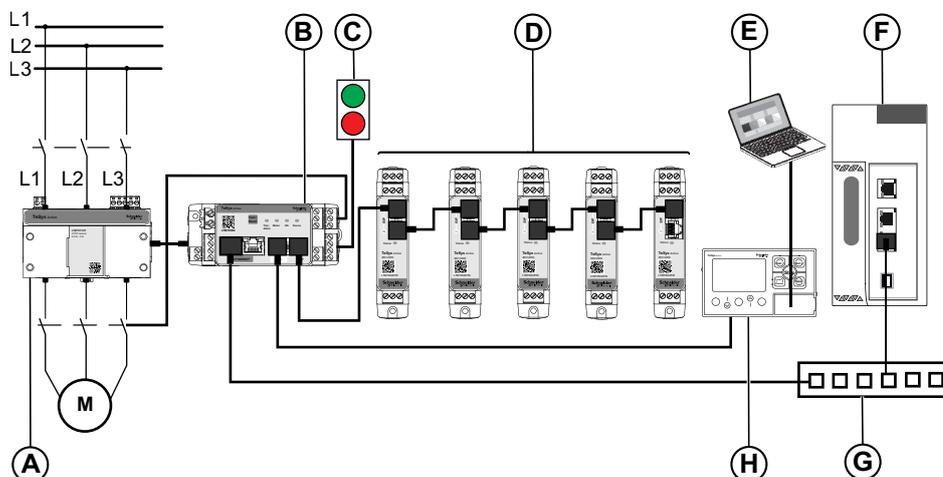
A   LTMTCT/LTMTCTV sensor module

B   LTMT main unit

C   Start/Stop commands

D   LTMT expansion modules

E   PC running SoMove FDT container software with TeSys Tera DTM installed and equipped with standard web server capability

F   Programmable Logic Controller (PLC) or Distributed Control System (DCS)

G   Ethernet switch

H   LTMTCUF control operator unit

For more information, refer to *TeSys Tera Motor Management System User Guide – DOCA0257EN*.

DTM Overview

The DTM (Device Type Manager) is used together with FDT container (Field Device Tool container, also referred to as FDT frame) to commission and diagnose TeSys Tera system. The combination of FDT container and DTM is also called commissioning software.

Once a DTM is installed, it can be used by different FDT containers. For example, SoMove™ software (Schneider Electric).

For more information, refer to *TeSys Tera Motor Management System User Guide – DOCA0257EN*.

The TeSys Tera DTM Library configures the hardware during commissioning and topology management.

TeSys Tera DTM Library Update Policy

The TeSys Tera DTM Library update is recommended to benefit from the latest features and potential bug fixes.

NOTE: It is recommended not to update the TeSys Tera DTM Library to the latest version, if the latest features are not required for your application and no bug fixes are provided.

Use this release note to determine whether an update to the latest version of the TeSys Tera DTM Library is relevant for your application.

Prerequisites

Operating Systems

The following operating systems are supported for TeSys Tera DTM Library:

- Microsoft Windows ® 10 and 11.

    NOTE: English is the recommended operating system language.

Software Requirements

The TeSys Tera DTM Library requires the following software installed on the PC:

- Microsoft .NET Framework v3.5 SP1
- SoMove Container v2.9.9 or later

Hardware Requirements

The following hardware requirements are recommended on the PC to install the TeSys Tera DTM Library.

Equipment	Minimum requirement	Recommended requirement
Processor	Pentium 4 or Core 2 Duo, 2 GHz	Intel® Core™ i3
RAM	2 GB	4 GB
Display	**Resolution**: 1024 x 768, 1366 x 768, 1600 x 1900, and 1920 x 1080 pixels	**Resolution**: 1600 x 1900 and 1920 x 1080 pixels
	DPI: 96 (100%) and 120 (125%)	**DPI**: 96 (100%) and 120 (125%)
Free hard disk space on system drive	1 GB	2 GB

Compatibility

The following table shows the compatibility of digital tools with the TeSys Tera system in active releases.

Configuration or Programming software		TeSys Tera firmware version
TeSys Tera DTM	DTM v2.0.0	TeSys Tera_Ethernet_V001.000.001.sedp

For more information about firmware update procedure, refer to *TeSys Tera Motor Management System DTM Library Online Help Guide – DOCA0275EN*.

TeSys Tera DTM Library Versions

The following versions of the TeSys Tera DTM Library are applicable for:

- LTMT main unit with Modbus RTU
- LTMT main unit with PROFIBUS DP
- LTMT main unit with EtherNet/IP

Version	Release
TeSys Tera DTM Library v2.0.0	Modbus RTU and PROFIBUS DP global release
TeSys Tera DTM Library v2.0.0	EtherNet/IP global release

Installation and Uninstallation of TeSys Tera DTM Library

Installation

Installation Preparation

Administrator or equivalent privilege is required to install the TeSys Tera DTM Library on your PC.

> **NOTE:** Before installing the new DTM version, ensure that the previous version is uninstalled to maintain better performance.

Installation Language

The language of the **Installation** dialog box is derived from the user language setting pre-defined by the operating system.

If the user language does not match any of the languages supported by the installation, the **Installation** dialog box will be displayed in English by default.

For more information about Installation of TeSys Tera DTM Library, refer to *TeSys Tera Motor Management System DTM Library Online Help Guide – DOCA0275EN*.

Uninstallation

Invoking the installation procedure of TeSys Tera DTM Library will result in a conventional presentation offering to remove, modify, or repair the existing setup with administrator or equivalent privilege.

FAQ

- The parameters available for configuration are based on the TeSys Tera system configuration.

- **Store to Device** operation cannot be performed when the motor is in run state.

- By default, the **Communication Loss** protection function is disabled. If this function is enabled and the device is connected to the SoMove software through the Modbus RTU communication port, and if you try to disconnect the DTM, the communication loss trip will be triggered in the device.

- Configuration of all setting under **Parameters List**, except for **User Map**, is disabled when the motor is in run state. In order to configure the parameters, stop the motor and then configure the settings.

- When configuring the start and stop of the motor in a system as a single relay, the DI Start **Validation Time** should be greater than the DI Stop **Validation Time**.

- To configure the parameters under the **Fieldbus Protocol Setting**, **Profibus Settings**, and **HMI Communication** sections, the device should be disconnected from the DTM. After performing a store to device operation to write the changed settings to the device, you can connect to the device by performing the **Scan Devices** using the new parameter values provided.

- If the **Main Unit Temperature** value is set to **None**, **Temperature Protection Main Unit** settings will be unavailable for configuration.

- If LTMTCUF control operator unit is connected on HMI port. The HMI communication settings must be configured as follows:

  ◦ **Node Address**: 1

  ◦ **Baud rate**: 19200 bps

  ◦ **Parity**: Even

  ◦ **Byte Format**: Big Endian

  For more information on the individual parameters, refer to *TeSys Tera Motor Management System User Guide – DOCA0257EN*.

- The value in the **Default Value** column remains constant, regardless of any configuration changes.

- CT sensor unit firmware version updates regardless of sensor detection status.

- If the CT is not connected, the DTM will highlight or display mismatch information in the **Device** tab.

- During operations that result in the disconnection of the TeSys Tera system from the DTM, a slight delay is observed before the corresponding status is updated on the DTM.

- You have to manually switch the protocol to TCP when loading the project.

- The HMI firmware version cannot be displayed, if the HMI enters boot load mode prior to establishing a connection with the device through the DTM.

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