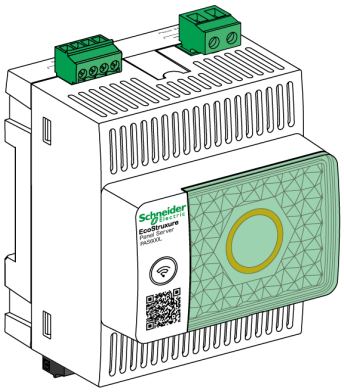
EcoStruxure Panel Server

Wireless Concentrator and Modbus Gateway, Datalogger and Energy Server

Firmware Release Notes

EcoStruxure offers IoT-enabled architecture and platform.

DOCA0178EN-00
05/2021



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Legal Information

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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.

EcoStruxure Panel Server Gateway

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

EcoStruxure Panel Server is a data concentrator for the following wireless devices:

- PowerTag Energy sensors
- Acti9 Active
- Environmental sensors
- HeatTag sensors (available mid 2021)
- Wireless indication auxiliaries for ComPacT NSX and ComPact NSXm (available end 2021)
- PowerTag Control modules (available early 2022)

To optimize energy and operation management solution, the EcoStruxure Panel Server provides easy and fast connection to edge control software, Building Management Systems, and cloud applications.

The 3 models of EcoStruxure Panel Server are Advanced[1], Universal, and Entry[1].

Firmware Release History

Date	EcoStruxure Panel Server Firmware version	Availability
April 2021	001.001.000	Release for manufacturing

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

The latest version of EcoStruxure Power Commission software is available at www.se.com.

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

1. Available end 2021

Firmware Versions

Firmware Version 001.001.000

Description

Firmware initial version for EcoStruxure Panel Server Universal.

Features

The following table presents the availability of features on EcoStruxure Panel Server Universal.

● Available

● Not available

Features		Availability
Functionality	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	●
Wi-Fi	2.4 GHz	●
	5 GHz	●
	Wi-Fi external antenna	●
IEEE 802.15.4 communication	Maximum number of wireless devices: • 20 PowerTag Energy sensors or Acti9 Active • or 65 Environmental sensors	●
Digital inputs		●
Configuration	EcoStruxure Power Commission software	●
	Embedded webpages for configuration of Ethernet and Modbus settings	●
	User management: single user	●
Protocols	Modbus TCP server	●
	Modbus TCP client	●
	DHCP client	●
	DHCP server	●
	DPWS	●
	HTTPS	●

Performances and Limitations

- The Typical response time to Modbus/TCP request for a wireless IEEE 802.15.4 device is 30 ms to 300 ms.
- The Maximum response time to Modbus/TCP request for a wireless IEEE 802.15.4 device is 3 s, set-up Modbus/TCP client time-out accordingly.
- Cache mechanisms are used internally to boost access over Modbus to data associated to wireless IEEE 802.15.4 devices. Freshness of data in cache

depends directly on the Modbus polling rate. To improve data freshness, a frequent polling is to be set up.

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

Related Documents

Title of documentation	Publication date	Reference number
EcoStruxure Panel Server - User Guide	04/2021	DOCA0172EN

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

Supported Devices

Wireless Devices

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

● Device available

EcoStruxure Panel Server model		**Universal**	**Comments**
EcoStruxure Panel Server firmware version		**001.001.000**	
TH110	EMS59440	●	FW v001.000.003 Modbus virtualization from PowerTag Link
CL110	EMS59443	●	FW v002.001.003 Modbus virtualization from PowerTag Link
PowerTag A9 M63 1P+W	A9MEM1520	●	FW v004.000.429 Modbus virtualization from PowerTag Link
PowerTag A9 M63 1P+N Top	A9MEM1521	●	FW v004.000.429 Modbus virtualization from PowerTag Link
PowerTag A9 M63 1P+N Bottom	A9MEM1522	●	FW v004.000.429 Modbus virtualization from PowerTag Link
PowerTag A9 M63 3P	A9MEM1540	●	FW v004.000.429 Modbus virtualization from PowerTag Link
PowerTag A9 M63 3P+N Top	A9MEM1541	●	FW v004.000.429 Modbus virtualization from PowerTag Link
PowerTag A9 M63 3P+N Bottom	A9MEM1542	●	FW v004.000.429 Modbus virtualization from PowerTag Link
PowerTag A9MEM 1543	A9MEM1543	●	FW v004.000.429 Modbus virtualization from PowerTag Link
PowerTag NSX 3P 250A	LV434020	●	FW v001.003.002 Modbus virtualization from PowerTag Link
PowerTag NSX 3P 630A	LV434022	●	FW v001.003.002 Modbus virtualization from PowerTag Link
PowerTag NSX 3P+N 250A	LV434021	●	FW v001.003.002 Modbus virtualization from PowerTag Link
PowerTag NSX 3P+N 630A	LV434023	●	FW v001.003.002 Modbus virtualization from PowerTag Link
PowerTag A9 P63 1P+N Top	A9MEM1560	●	FW v004.000.429 Modbus virtualization from PowerTag Link
PowerTag A9 P63 1P+N Top	A9MEM1561	●	FW v004.000.429 Modbus virtualization from PowerTag Link
PowerTag A9 P63 1P+N Bottom	A9MEM1562	●	FW v004.000.429 Modbus virtualization from PowerTag Link
PowerTag A9 P63 1P+N Bottom RCBO	A9MEM1563	●	FW v004.000.429 Modbus virtualization from PowerTag Link
PowerTag A9 F63 1P+N 110V	A9MEM1564	●	FW v004.000.429 Modbus virtualization from PowerTag Link
PowerTag A9 F63 3P+N	A9MEM1570	●	FW v004.000.429 Modbus virtualization from PowerTag Link
PowerTag A9 P63 3P+N Top	A9MEM1571	●	FW v004.000.429 Modbus virtualization from PowerTag Link

EcoStruxure Panel Server model		Universal	Comments
EcoStruxure Panel Server firmware version		001.001.000	
PowerTag A9 P63 3P+N Bottom	A9MEM1572	●	FW v004.000.429 Modbus virtualization from PowerTag Link
PowerTag A9 F63 3P	A9MEM1573	●	FW v004.000.429 Modbus virtualization from PowerTag Link
PowerTag A9 F63 3P+N 110/230V	A9MEM1574	●	FW v004.000.429 Modbus virtualization from PowerTag Link
PowerTag F160 3P/3P+N	A9MEM1580	●	FW v001.001.0000 Modbus virtualization from PowerTag Link
PowerTag R200 3P/3P+N	A9MEM1590	●	FW v001.001.000
PowerTag R200 3P/3P+N	A9MEM1591	●	FW v001.001.000
PowerTag R1000 3P/3P+N	A9MEM1592	●	FW v001.001.000
PowerTag R2000 3P/3P+N	A9MEM1593	●	FW v001.001.000
Wireless Energy Sensor QO 10-30A 1P+N (NEMA)	PLTQO301P	●	FW v004.000.429
Wireless Energy Sensor QO 35-60A 1P+N (NEMA)	PLTQO601P	●	FW v004.000.429
Wireless Energy Sensor E-Frame 10-60A 1P+N (NEMA)	PLTE601P	●	FW v004.000.429
Wireless Energy Sensor QO 10-30A 3P (NEMA)	PLTQO303P	●	FW v004.000.429
Wireless Energy Sensor QO 10-30A 3P (NEMA)	PLTQO603P	●	FW v004.000.429
Wireless Energy Sensor E-Frame 10-60A 3P (NEMA)	PLTE603P	●	FW v004.000.429
Wireless Energy Sensor Rope 120A 3P (NEMA/IEC)	PLTR1203P	●	FW v001.001.000
Wireless Energy Sensor Rope 600A 3P (NEMA/IEC)	PLTR6003P	●	FW v001.001.000
Wireless Energy Sensor Rope 1000A 3P (NEMA/IEC)	PLTR10003P	●	FW v001.001.000
Wireless Energy Sensor Rope 2000A 3P (NEMA/IEC)	PLTR20003P	●	FW v001.001.000
Acti9 ARC iC60 25A 2P Add on	A9TAA2225	●	FW v1.11.0.403
Acti9 ARC iC60 40A 2P Add on	A9TAA2240	●	FW v1.11.0.403
Acti9 ARC iDT40 25A 1P+N Add on	A9TAA2625	●	FW v1.11.0.403
Acti9 ARC iDT40 40A 1P+N Add on	A9TAA2640	●	FW v1.11.0.403
Acti9 ARC iC60 25A 2P Add on	A9TAB2225	●	FW v1.11.0.403
Acti9 ARC iC60 40A 2P Add on	A9TAB2240	●	FW v1.11.0.403
Acti9 ARC iC40 25A 1P+N Add on	A9TAB2625	●	FW v1.11.0.403
Acti9 ARC iC40 40A 1P+N Add on	A9TAB2640	●	FW v1.11.0.403
Acti9 iCV40 ARC 10A 1P+N All in One	A9TDEC610	●	FW v1.11.0.403
Acti9 iCV40 ARC 13A 1P+N All in One	A9TDEC613	●	FW v1.11.0.403
Acti9 iCV40 ARC 16A 1P+N All in One	A9TDEC616	●	FW v1.11.0.403
Acti9 iCV40 ARC 6A 1P+N All in One	A9TDFC606	●	FW v1.11.0.403
Acti9 iCV40 ARC 10A 1P+N All in One	A9TDFC610	●	FW v1.11.0.403
Acti9 iCV40 ARC 13A 1P+N All in One	A9TDFC613	●	FW v1.11.0.403
Acti9 iCV40 ARC 16A 1P+N All in One	A9TDFC616	●	FW v1.11.0.403

EcoStruxure Panel Server model		**Universal**	**Comments**
EcoStruxure Panel Server firmware version		**001.001.000**	
Acti9 iCV40 ARC 25A 1P+N All in One	A9TDFC625	●	FW v1.11.0.403
Acti9 iCV40 ARC 32A 1P+N All in One	A9TDFC632	●	FW v1.11.0.403
Acti9 iCV40 ARC 40A 1P+N All in One	A9TDFC640	●	FW v1.11.0.403
Acti9 iCV40 ARC 6A 1P+N All in One	A9TDFD606	●	FW v1.11.0.403
Acti9 iCV40 ARC 10A 1P+N All in One	A9TDFD610	●	FW v1.11.0.403
Acti9 iCV40 ARC 16A 1P+N All in One	A9TDFD616	●	FW v1.11.0.403
Acti9 iCV40 ARC 20A 1P+N All in One	A9TDFD620	●	FW v1.11.0.403
Acti9 iCV40 ARC 25A 1P+N All in One	A9TDFD625	●	FW v1.11.0.403
Acti9 iCV40 ARC 32A 1P+N All in One	A9TDFD632	●	FW v1.11.0.403
Acti9 iC40 ARC 10A 1P+N All in One	A9TPDD610	●	FW v1.11.0.403
Acti9 iC40 ARC 13A 1P+N All in One	A9TPDD613	●	FW v1.11.0.403
Acti9 iC40 ARC 16A 1P+N All in One	A9TPDD616	●	FW v1.11.0.403
Acti9 iC40 ARC 10A 1P+N All in One	A9TPED610	●	FW v1.11.0.403
Acti9 iC40 ARC 13A 1P+N All in One	A9TPED613	●	FW v1.11.0.403
Acti9 iC40 ARC 16A 1P+N All in One	A9TPED616	●	FW v1.11.0.403
Acti9 iC40 ARC 25A 1P+N All in One	A9TPED625	●	FW v1.11.0.403
Acti9 iC40 ARC 32A 1P+N All in One	A9TPED632	●	FW v1.11.0.403
Acti9 iC40 ARC 40A 1P+N All in One	A9TPED640	●	FW v1.11.0.403
Acti9 VigiARC iC60 25A 2P Add on	A9TYAE225	●	FW v1.11.0.403
Acti9 VigiARC iC60 40A 2P Add on	A9TYAE240	●	FW v1.11.0.403
Acti9 VigiARC iDT40 25A 1P+N Add on	A9TYAE625	●	FW v1.11.0.403
Acti9 VigiARC iDT40 40A 1P+N Add on	A9TYAE640	●	FW v1.11.0.403
Acti9 VigiARC iC60 25A 2P Add on	A9TYBE225	●	FW v1.11.0.403
Acti9 VigiARC iC60 40A 2P Add on	A9TYBE240	●	FW v1.11.0.403
Acti9 VigiARC iC40 25A 1P+N Add on	A9TYBE625	●	FW v1.11.0.403
Acti9 VigiARC iC40 40A 1P+N Add on	A9TYBE640	●	FW v1.11.0.403

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DOCA0178EN-00