

# Schneider StarCharge Fast 720

## Modbus Protocol Connectivity Guide

D4082297\_00

04/2026



## Legal Information

The information provided in this document contains general descriptions, technical characteristics and/or recommendations related to products/solutions.

This document is not intended as a substitute for a detailed study or operational and site-specific development or schematic plan. It is not to be used for determining suitability or reliability of the products/solutions for specific user applications. It is the duty of any such user to perform or have any professional expert of its choice (integrator, specifier or the like) perform the appropriate and comprehensive risk analysis, evaluation and testing of the products/solutions with respect to the relevant specific application or use thereof.

The Schneider Electric brand and any trademarks of Schneider Electric SE and its subsidiaries referred to in this document are the property of Schneider Electric SE or its subsidiaries. All other brands may be trademarks of their respective owners.

This document and its content are protected under applicable copyright laws and provided for informative use only. No part of this document may be reproduced or transmitted in any form or by any means (electronic, mechanical, photocopying, recording, or otherwise), for any purpose, without the prior written permission of Schneider Electric.

Schneider Electric does not grant any rights or license for commercial use of the document or its content, except for a non-exclusive and personal license to consult it on an "as is" basis.

Schneider Electric reserves the right to make changes or updates with respect to or in the content of this document or the format thereof, at any time without notice.

**To the extent permitted by applicable law, no responsibility or liability is assumed by Schneider Electric and its subsidiaries for any errors or omissions in the informational content of this document, as well as any non-intended use or misuse of the content thereof.**

# Safety 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.

<b>⚠ DANGER</b>
<b>DANGER</b> indicates a hazardous situation which, if not avoided, will result in death or serious injury.

<b>⚠ WARNING</b>
<b>WARNING</b> indicates a hazardous situation which, if not avoided, could result in death or serious injury.

<b>⚠ CAUTION</b>
<b>CAUTION</b> indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

<b>NOTICE</b>
<b>NOTICE</b> is used to address practices not related to physical injury. The safety alert symbol shall not be used with this signal word.

## 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.

## Safety Instructions

### **DANGER**

#### **HAZARD OF ELECTRIC SHOCK**

- Do not open the product.
- Product to be serviced by qualified personnel only.

**Failure to follow these instructions will result in death or serious injury.**

**NOTE:** All instructions applicable to the enclosed product and all safety precautions must be observed.

For more information, you can download the app of the Customer Care Center by using the following QR code:



# Table of Contents

Legal Information .....	2
Safety Information.....	3
Please Note.....	3
Safety Instructions.....	4
About the Book .....	6
Document Version History.....	6
Terminology .....	6
Related Documents.....	6
Safety Precautions .....	7
Product Family .....	7
Acceptable Scenario .....	7
Modbus Interface .....	8
Modbus Configuration.....	8
Configuration as TCP Server.....	8
Configuration as TCP Client.....	9
Modbus Register Table.....	10
Offline Mode .....	13

# About the Book

Schneider Electric technical manuals

## Document Version History

Document Reference-Revision	Release Date	Evolution
00	04/2026	Create this document.

## Terminology

Anacronym	Designation
EVSE	EVSE (Electric Vehicle Supply Equipment) refers to the equipment and control systems used to supply electrical energy to electric vehicles.
Modbus	Modbus is an open, master-slave (client/server) industrial communication protocol widely used in industrial automation and energy management applications.
OCPP	OCPP (Open Charge Point Protocol) is an open communication protocol that enables interoperability between electric vehicle supply equipment (EVSE) and backend management systems.

## Related Documents

Document	Reference	Content	Audience
Schneider StarCharge Fast 720 Power Cabinet Installation Guide	JPS6871301	Schneider Electric, Civil	Mechanical and electrical installation guidelines of Power Cabinet.
Schneider StarCharge Fast 720 Dispenser Installation Guide	JPS7899601	Schneider Electric, Civil	Mechanical and electrical installation guidelines of Flood-standing Dispenser.
Schneider StarCharge Fast 720 Owners Guide	D3998049	Schneider Electric	Operation and maintenance guidelines
Schneider StarCharge Fast 720 Commissioning Guide	D3998054	Schneider Electric	Electrical and Communication guidelines.

## Safety Precautions

### **NOTICE**

#### **HAZARD OF INCORRECT USE**

- This document contains general descriptions and/or general technical specifications of the products mentioned. It cannot be used to determine the suitability or reliability of these products for specific user applications. It is the responsibility of each user or integrator to conduct the appropriate risk analysis in full, assessing and testing products as regards the application in which they will be used and the execution of this application. Neither Schneider Electric nor any of its affiliated companies or subsidiaries can be held responsible for incorrect use of the information contained in this document. If you have any suggestions for improvements or corrections, or have found errors in this publication, please notify us.
- All relevant state, regional, and local safety regulations must be observed when installing and using this product. For reasons of safety and to ensure compliance with documented system data, only the manufacturer should perform repairs to components. When equipment is used for applications with technical safety requirements, follow the relevant instructions.

**Failure to follow these instructions can result in equipment damage.**

## Product Family

The document is applicable to the following products families.

- Schneider StarCharge Fast 720 (720 range and 480 range)

## Acceptable Scenario

The document is applicable to the scenario below.

- Charging system which comprises of maximum 1 Power Cabinet and maximum 6 Floor-standing Dispensers.
- Charging system which comprises of maximum 1 Power Cabinet and maximum 12 Overhead Dispensers.
- Charging system which comprises of maximum 1 Power Cabinet and maximum 12 connectors mix installation of Floor-standing Dispensers and Overhead Dispensers.

# Modbus Interface

EVlink Pro DC / Schneider StarCharge Fast Modbus interface can be used to limit the charging power of the charging station.

## Support Modbus Protocol

- Modbus TCP

## Support Modbus Mode

- Modbus Slave

## Support TCP Mode

- TCP Servier
- TCP Client

# Modbus Configuration

## Configuration as TCP Server

The charger could be configured as a TCP server in the Modbus TCP link, but for the Modbus mode, it still works at Modbus Slave.

The charger supports enabling the secured mode via TLS (by default and recommended) and use different ports in secured mode and non-secure mode.

- Port 502 is used for Modbus non-secured mode.
- Port 802 is used for Modbus secured mode with TLS.

If you configurate the charger as the TCP server, it should be able to accept the connection from other devices, so you need to configurate a port forwarding in the internal router.

### Steps to enable the Modbus function.

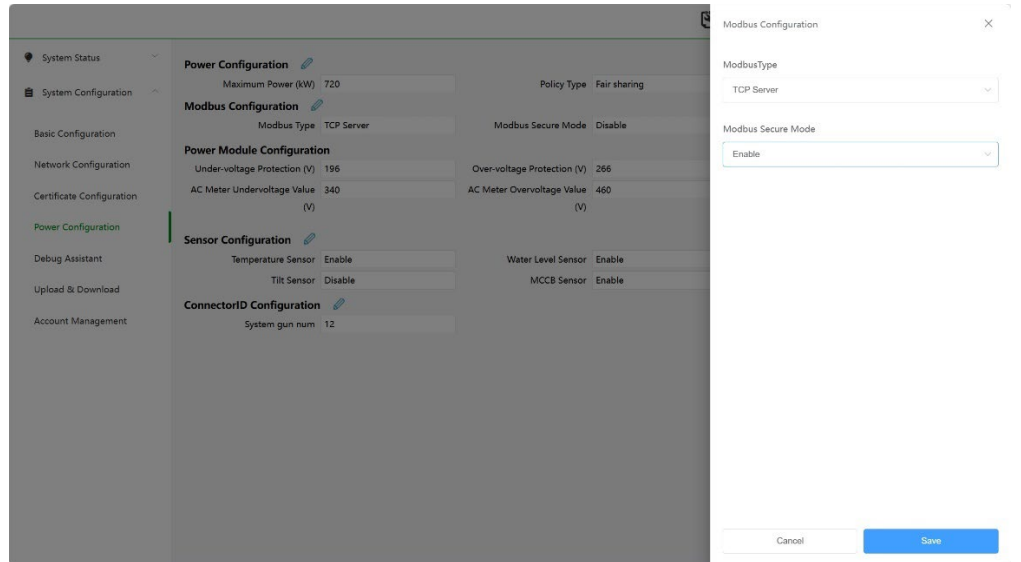
**STEP 1:** Follow *Schneider StarCharge Fast 720 Commissioning Guide* to access the WEB UI of Power Cabinet.

**STEP 2:** Navigate to **Power Configuration** tab, click the edit button (shown as a pencil icon) of besides **Modbus Configuration**.

**STEP 3:** Select **TCP Server** in the **Modbus Type** item.

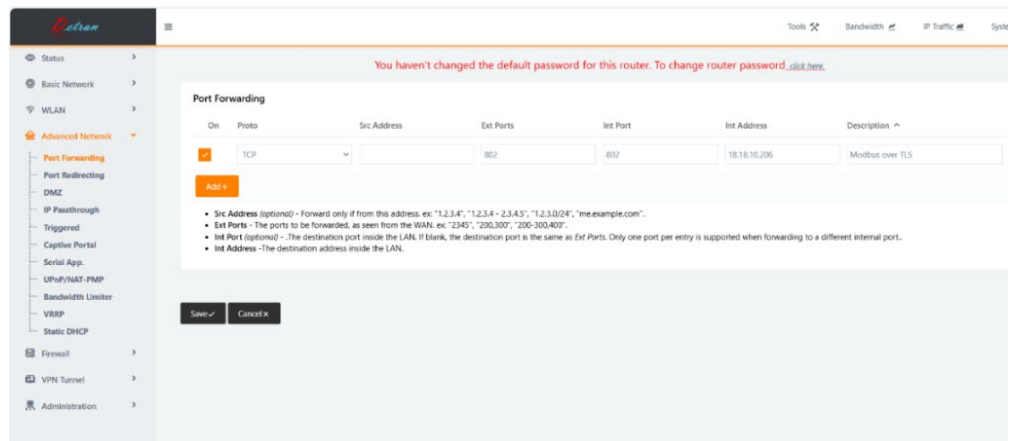
**STEP 4:** Click **Save** button.

**NOTE:** The Secured Mode is enabled by default, if you don't want to use it, please disable it manually.



**Steps to configure the port forwarding.**

- STEP 1:** Follow *Schneider StarCharge Fast 720 Commissioning Guide* to access the configuration page of internal router.
- STEP 2:** Navigate to **Port Forwarding** menu under **Advanced Network**.
- STEP 3:** Fill in expected external port on WAN in Ext Ports field.
- STEP 4:** Fill in Modbus port of Charger in Int Port field (502 or 802, decided by whether you enable the secured mode).
- STEP 5:** Fill in 192.168.1.136 (the IP address of Power Cabinet, if you have changed it, please follow your real situation) in **Int Address field**.
- STEP 6:** Click **Add+** button to add this rule.
- STEP 7:** Click **Save** button to complete the configuration.



**Configuration as TCP Client**

The charger could be configured as a TCP client in the Modbus TCP link, and for the Modbus mode, it works at Modbus Slave.

When the charger works as a TCP client, you need to input the IP address of the TCP server. With the configuration of the IP address of TCP server in WEB, the charger will connect to the server.

**Steps to enable the Modbus function.**

**STEP 1:** Follow *Schneider StarCharge Fast 720 Commissioning Guide* to access the WEB UI of Power Cabinet.

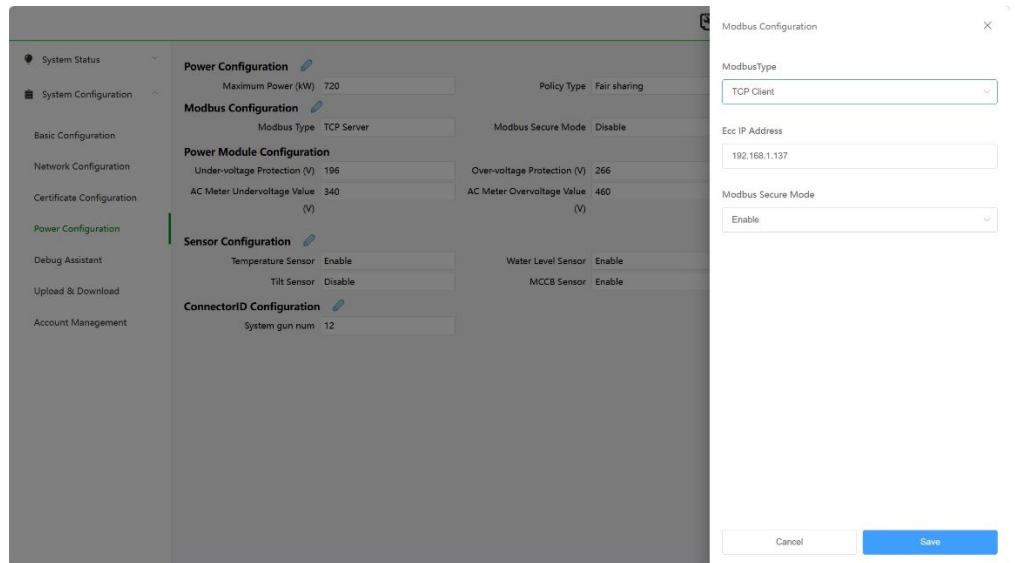
**STEP 2:** Navigate to **Power Configuration** tab, click the edit button (shown as a pencil icon) of besides **Modbus Configuration**.

**STEP 3:** Select **TCP Server** in the **Modbus Type** item.

**STEP 4:** Input the IP address of Modbus device.

**STEP 5:** Click **Save** button.

**NOTE:** The Secured Mode is enabled by default, if you don't want to use it, please disable it manually.



## Modbus Register Table

Please see the total register information on the table below.

**Function:**

- 0x03: readable keeping register.
- 0x04: readable inputting register.
- 0x10: writable register.

**RW:**

- RO: read only.
- RW: read and write.

**Type:**

- UINT16: Unsigned 16-bit integer data, with the high byte preceding the low byte.
- UINT32: Unsigned 32-bit integer data, with the high word preceding the low word and the high byte preceding the low byte.

- STRING: Character string.

Table 1 - Readable Charger Information

Address (Dec)	Function Code	R/W	Name	Type	No. of Bytes	Comments
0	0x04	RO	Charger status	UINT32	4	1: Run 2: Stop
2	0x04	RO	Error state	UINT32	4	1: Normal 2: Error
4	0x04	RO	Error code part1	STRING	4	First 4 digits from OCPP error codes.
6	0x04	RO	Error code part 2	STRING	4	Last 4 digits from OCPP error codes.
8	0x04	RO	Number of connectors	UINT32	4	Real number of connectors of the installation instance.
10	0x04	RO	EVSE serial number	STRING	32	
42	0x04	RO	EVSE firmware version number	STRING	32	Only be able to get firmware version of Power Cabinet.
58	0x04	RO	Identification of product type and features (rated Power)	UNIT32	4	480000: 480kW 720000: 720kW
62	0x04	RO	Power Module temperature above the threshold of 55°C	UINT32	4	1: Normal 2: High-temperature threshold reached (> 55°C)
66	0x04	RO	Charging power	UINT32	4	Unit: 0.1KW The real-time charging power of the whole charger
68	0x04	RO	Real-time charging demand power	UINT32	4	Unit: 0.1KW The real-time demand power from all vehicles that are in charging.
70	0x04	RO	MAX demand power	UINT32	4	Unit: 0.1KW The maximum allows power of all vehicles that are in charging.
78	0x04 0x10	RW	Offline save value	UINT32	4	Unit: W Power limitation of the whole charger when Modbus offline.
80	0x04	RO	Modbus version	UINT32	4	Modbus protocol verison
82	0x04 0x10	RW	Control mode	UINT16	2	Scope of power limitation command. 0: Only whole charger. 1: Only single connector.
84	0x04 0x10	RW	Offline time	UINT16	2	Unit: 60s Time to judge offline.
102	0x04	RO	CPU ID	STRING	32	The uniform ID of every EVSE. Only use in slave mode.

Table 2 - Readable Charger AC Information

Address (Dec)	Function Code	R/W	Name	Type	No. of Bytes	Comments
---------------	---------------	-----	------	------	--------------	----------

170	0x04	RO	Charging current phase 1 [mA]	UNIT32	4	Unit: mA Meter Phase A current.
172	0x04	RO	Charging current phase 2 [mA]	UNIT32	4	Unit: mA Meter Phase B current.
174	0x04	RO	Charging current phase 3 [mA]	UNIT32	4	Unit: mA Meter Phase C current.
180	0x04	RO	Measurement voltage phase 1 [V]	UNIT32	4	Unit: V Meter Phase A voltage.
182	0x04	RO	Measurement voltage phase 2 [V]	UNIT32	4	Unit: V Meter Phase B voltage.
184	0x04	RO	Measurement voltage phase 3 [V]	UNIT32	4	Unit: V Meter Phase C voltage.

Table 3 - Readable Connector Information

Address (Dec)	Function Code	R/W	Name	Type	No. of Bytes	Comments
n000	0x04	RO	Connector charging state	UINT32	4	1: Running/Pause 2: Stopped 3: Stopping 4: Fault 5: Alarm
n002	0x04	RO	Charging voltage DC	UINT32	4	Unit: V Real-time output voltage, should be 0 if there is no charging session.
n004	0x04	RO	Charging current DC	UINT32	4	Unit: A Real-time output current, should be 0 if there is no charging session.
n006	0x04	RO	Charging power	UINT32	4	Unit: W Real-time output power, should be 0 if there is no charging session.
n011	0x04	RO	Current active charging time	UINT32	4	Unit: S Duration of current charging session.
n015	0x04	RO	Charged energy in the current session	UINT32	4	Unit: Wh Total energy of current charging session.
n019	0x04	RO	SOC	UINT32	4	Unit: 1%
n021	0x04	RO	Accumulated total charging power	UINT32	4	Unit: Wh Total energy of this connector.
n057	0x04	RO	Maximum charging power of the gun	UINT32	4	Unit: W
n059	0x04	RO	Connector type	UINT32	4	0: Disable 1: CCS2
n061	0x04	RO	Run status	UINT32	4	0: Idle(Unplugged) 1: Idle(Plugged) 2: Running(Charging) 3: Running(discharge) 4: Stopped(Plugged)

n070	0x04	RO	Identification RFID card Number	STRING	21	User RFID ID
n100	0x04	RO	Charging maximum demand power	UINT32	4	Unit: W Maximum demand charging power
n103	0x04	RO	Real-time demand voltage	UINT32	4	Unit: V
n105	0x04	RO	Real-time demand current	UINT32	4	Unit: A
n500	0x03	RO	Modbus TCP interface limits maximum power	UINT32	4	Unit: W Charging connector power setting. When both charger power setting and charging gun power setting work, the charging power will be limited to minimum of both setting.

Table 3 - Writable Charger or Connector Information

Address (Dec)	Function Code	R/W	Name	Type	No. of Bytes	Comments
500	0x10	W	Modbus TCP interface limits maximum power (entire charger)	UINT32	4	Unit: W Can't be set less than 10kW.
504	0x10	W	Restart Charging Station After reset command was sent one value must be 0 again	UNIT32	4	0: Normal Mode 1: Restart
n500	0x10	W	Modbus TCP interface limits maximum power	UNIT32	4	Unit: W

## Offline Mode

TCP Keepalive mechanism is used for trigger offline mode.

Register 78 is used for configuring charging limitations in offline status.

## Schneider Electric

35 rue Joseph Monier  
92500 Rueil Malmaison – France  
Phone: +33 (0) 1 41 29 70 00  
[www.se.com](http://www.se.com)

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

© 2025-2026 Schneider Electric. All rights reserved.

Rev.D4082297\_00

D4082297