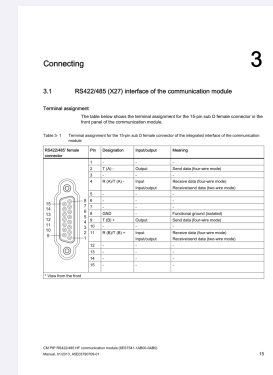


FIELD INSTALLATION QUICK GUIDE

Installation Instructions

Siemens 6ES7541-1AB00-0AB0

CM PtP RS422/485 HF communication module



PRODUCT	6ES7541-1AB00-0AB0
FAMILY	SIMATIC S7-1500 / ET 200MP
FUNCTION	CM PtP RS422/485 HF communication module
STATUS	Verify exact configuration

Prepared by Amikon Limited from Siemens A5E03790709-01, 01/2013. This guide does not replace the complete manufacturer manual, site procedure, hazardous-area drawing, or approval document.

01 CONFIRM THE ORDERED CONFIGURATION

Electrical interface	Isolated RS422 / RS485 differential serial interface
Transmission rate	300 bit/s to 115.2 kbit/s
Cable length / rate	250 m at 115.2; 500 m at 38.4; 1200 m at up to 19.2 kbit/s
Connector	15-pin D-sub female connector with screw lock
Protocols	Freeport, 3964(R), Modbus RTU; USS via STEP 7 instructions
Maximum telegram length	4 kbyte for Freeport and 3964(R)
Receive buffer	8 kbyte; up to 255 telegrams

02 MOUNTING AND CONNECTION

- Qualified personnel must isolate station power and secure the machine before work.
- Seat the module and U connector on the S7-1500 mounting rail; check the station power budget.
- Use the official 15-pin X27 assignment; select two-wire RS485 or four-wire RS422 deliberately.
- Use shielded cable and connector casings. Connect GND pin 8 at both ends; never bond cable shield to GND.
- Ground the cable shield on the grounding rail and match length to the selected baud rate.

OFFICIAL INSTALLATION REFERENCE

Connecting

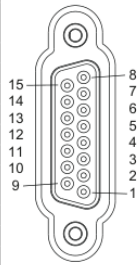
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3.1 RS422/485 (X27) interface of the communication module

Terminal assignment

The table below shows the terminal assignment for the 15-pin sub D female connector in the front panel of the communication module.

Table 3- 1 Terminal assignment for the 15-pin sub D female connector of the integrated interface of the communication module

RS422/485* female connector	Pin	Designation	Input/output	Meaning
	1	-	-	-
	2	T (A) -	Output	Send data (four-wire mode)
	3	-	-	-
	4	R (A)/T (A) -	Input	Receive data (four-wire mode)
	5	-	-	-
	6	-	-	-
	7	-	-	-
	8	GND	-	Functional ground (isolated)
	9	T (B) +	Output	Send data (four-wire mode)
	10	-	-	-
	11	R (B)/T (B) +	Input	Receive data (four-wire mode)
	12	-	-	-
	13	-	-	-
	14	-	-	-
	15	-	-	-

* View from the front

Official manufacturer reference reproduced from Siemens A5E03790709-01, 01/2013. Use the current source document and all referenced drawings and notes for installation.

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CABLE ROUTING AND CONNECTION

- Seat the module and U connector on the S7-1500 mounting rail; check the station power budget.
- Use the official 15-pin X27 assignment; select two-wire RS485 or four-wire RS422 deliberately.
- Use shielded cable and connector casings. Connect GND pin 8 at both ends; never bond cable shield to GND.
- Ground the cable shield on the grounding rail and match length to the selected baud rate.
- Restore port parameters and cyclic communication instructions; test transmit, receive and diagnostic status.

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INITIAL SYSTEM CHECKS

- Confirm model identity and compatible system components before energizing.
- Verify wiring, grounding, enclosure, and applicable hazardous-area requirements.
- Confirm normal RUN, channel operation and diagnostic status after commissioning.
- Record the installed order number and baseline operating condition.

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CONTROLLED DOCUMENTS

Official source	Siemens A5E03790709-01, 01/2013
Product record	6ES7541-1AB00-0AB0
Manufacturer	Siemens
Support	INFO@AMIKON.CN