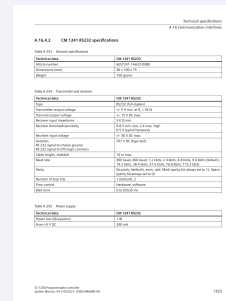


AMIKON TECHNICAL INTELLIGENCE

Product Data Sheet

Siemens 6ES7241-1AH32-0XB0

CM 1241 RS232 Communication Module



INTERFACE	CONNECTOR	MAX. RATE	MAX. CABLE
RS232	9-pin male	115.2 kbit/s	10 m

Siemens 6ES7241-1AH32-0XB0 is the SIMATIC S7-1200 CM 1241 RS232 communication module. Its male 9-pin D-sub interface supports full-duplex serial communication and Freeport operation. The module provides configurable baud rates from 300 to 115200 bit/s, with selectable parity, stop bits and flow control.

01

VERIFIED PRODUCT PARAMETERS

Serial interface	RS232, full duplex
Connector	Male 9-pin D-sub
Supported baud rates	300, 600, 1200, 2400, 4800, 9600, 19200, 38400, 57600, 76800, 115200 bit/s
Parity options	None, even, odd, mark or space
Stop bits	1 or 2; default 1
Flow control	Hardware or software
Configurable wait time	0 to 65535 ms
Maximum shielded cable length	10 m
Minimum transmitter output	+/-5 V at 3 kilohms load
Maximum transmitter output	+/-15 V DC

02 ADDITIONAL TECHNICAL DATA

Minimum receiver input impedance	3 kilohms
Maximum receiver input voltage	+/-30 V DC
Isolation type-test voltage	707 V DC: RS232 signal to chassis and CPU logic common
Power dissipation	1 W
Current from 5 V DC	200 mA

03 SYSTEM ROLE AND APPLICATIONS

Use the module for an engineered point-to-point connection to a compatible RS232 device. The PLC program must implement the required message format and handling; electrical connection alone does not provide the device protocol. Verify the pin assignment, firmware and shielded cable length before commissioning the link.

- Send job data to a serial printer: Transmit an engineered print message from the controller to a compatible RS232 printer. Match the printer command format and flow-control settings, then verify complete output and the response to an unavailable printer before relying on production records.
- Receive barcode data at a station: Read identification messages from a compatible serial barcode reader. Match message boundaries and character settings, validate the received identifier, and define the handling of missing or invalid scans before using the data to advance the process.
- Exchange data with a vision device: Connect a camera or vision system that provides a compatible RS232 protocol. Engineer the command and result exchange, including timing and error handling, and verify that the received inspection result is associated with the intended production item.

04 OFFICIAL INSTALLATION FACTS

- Isolate power and place the connected equipment in an approved maintenance state before fitting the module.
- Install the CM 1241 locally on the left of the compatible S7-1200 CPU.
- Check RxD pin 2, TxD pin 3, logic ground pin 5 and the separate chassis shell connection.
- Verify every required handshake signal against the remote-device documentation and use a shielded cable within 10 m.

05 OFFICIAL DOCUMENTATION

Siemens S7-1200 A5E02486680-AO, 05/2021; RS232 pin extract p1354

AMIKON PRODUCT SUPPORT

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