MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

SIEMENS SIMATIC S7

6ES7541-1AB00-0AB0

SERIAL COMMUNICATION MODULE

Used with the applicable Siemens Simatic S7 configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: Siemens official manufacturer documentation

SIEMENS

Product data sheet 6ES7541-1AB00-0AB0



SIMATIC S7-1500,
CM PTP RS422/485 HF COMMUNICATION MODUL FOR SERIAL CONNECTION RS422,
RS485, FREEPORT, 3964(R), USS,
MODBUS RTU MASTER, SLAVE,
115200 KBIT/S,
15-PIN SUB-D FEMALE CONNECTOR

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General information	
Product function	
I&M data	Yes ; I&M 0
Engineering with	
STEP 7 TIA Portal can be configured/integrated as of version	V12.0 / V12.0
STEP 7 can be configured/integrated as of version	V5.5 SP2 or higher with a GSD file
PROFINET as of GSD version/GSD revision	v2.3 / -
Installation type/mounting	
Mounting rail installation possible	Yes ; S7-1500 mounting rail
Supply voltage	
Type of supply voltage	system power supply
Input current	
Current consumption (rated value)	33 mA ; From the backplane bus
Power	
Power available from the backplane bus	0.65 W
Power losses	
Power loss, typ.	0.6 W
Address area	

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Occupied address area	
Inputs	8 byte
Interfaces	
1st interface	
Interface types	
RS 422	Yes
RS 485	Yes
Interface types	
RS 485	
Transmission rate, max.	115.2 kbit/s
Cable length, max.	1200 m
RS 422	
	115.2 kbit/s
Cable length, max.	1200 m
4-wire full duplex connection	Yes
4-wire multipoint connection	No
Protocols	
Integrated protocols	
Freeport	
Telegram length, max.	4 kbyte
Bits per character	7 or 8
Number of stop bits	1 or 2 bit
Parity	None, even, odd, always 1, always 0, any
3964 (R)	
Telegram length, max.	4 kbyte
	7 or 8
Number of stop bits	1 or 2 bit
Parity	None, even, odd, always 1, always 0, any
Modbus RTU master	
Address area	1 to 247, extended 1 to 65535
Number of slaves, max.	32
MODBUS RTU slave	
Address area	1 to 247, extended 1 to 65535
Frame buffer	
Buffer memory for message frames	8 kbyte
Number of message frames which can be buffered	255
Interrupts/diagnostics/status information	
Alarms	

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Diagnostic alarm	Yes
Hardware interrupt	No
Diagnostic messages	
Diagnostics	Yes
Wire break	Yes
Diagnostics indication LED	
RUN LED	Yes ; Green LED
ERROR LED	Yes ; Red LED
Receive RxD	Yes ; yellow LED
Send TxD	Yes ; yellow LED
Galvanic isolation	
between the backplane bus and interface	Yes
Isolation	
Isolation checked with	707 V DC (type test)
Ambient conditions	
Operating temperature	
horizontal installation, min.	0 °C
horizontal installation, max.	60 °C
vertical installation, min.	0 °C
vertical installation, max.	40 °C
Decentralized operation	
to SIMATIC S7-300	Yes
to SIMATIC S7-400	Yes
to SIMATIC S7-1500	Yes
To standard PROFINET controller	Yes
Supports fast startup	Yes
Dimensions	
Width	35 mm
Height	147 mm
Depth	127 mm
Weight	
Weight, approx.	0.22 kg
Status	Jul 1, 2013

subject to modifications
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