SIEMENS

Data sheet

6ES7541-1AB00-0AB0



SIMATIC S7-1500, CM PTP RS422/485 HF Communication module for Serial connection RS422 and RS485, Freeport, 3964 (R), USS, MODBUS RTU Master, Slave, 115200 Kbit/s, 15-Pin D-sub socket

Figure similar

General information	
Product type designation	CM PtP RS 422 / 485 HF
Product function	
 I&M data 	Yes; I&M 0
Fast startup	Yes
Engineering with	
 STEP 7 TIA Portal configurable/integrated from version 	V12 / V12
 STEP 7 configurable/integrated from version 	V5.5 SP2 with GSD file
 PROFIBUS from GSD version/GSD revision 	- / -
 PROFINET from GSD version/GSD revision 	V2.3 / -
Installation type/mounting	
Rail mounting	Yes; S7-1500 mounting rail
Supply voltage	
Design of the power supply	system power supply
Type of supply voltage	DC
Input current	
Current consumption (rated value)	43 mA; From the backplane bus
Power	
Power available from the backplane bus	0.65 W
Power loss	
Power loss, typ.	0.6 W
Address area	
Address space per module	
Inputs	8 byte
Interface types	
RS 485	
Transmission rate, max.	115.2 kbit/s
Cable length, max.	1 200 m
RS 422	
Transmission rate, max.	115.2 kbit/s
 Cable length, max. 	1 200 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
— Bits per character	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
Telegram buffer	
 Buffer memory for telegrams 	8 kbyte
Number of telegrams which can be buffered	255
Interrupts/diagnostics/status information	
Diagnostics function	Yes
Alarms	
Diagnostic alarm	Yes
Hardware interrupt	No
Diagnoses	
Wire-break	Yes
Diagnostics indication LED	
RUN LED	Yes; green LED
• ERROR LED	Yes; red LED
 Receive RxD 	Yes; Yellow LED
 Transmit TxD 	Yes; Yellow LED
Potential separation	
Potential separation between backplane bus and interface	Yes
	Yes
between backplane bus and interface	Yes 707 V DC (type test)
between backplane bus and interface Isolation	
between backplane bus and interface Isolation Isolation tested with Ambient conditions	
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between backplane bus and interface Isolation Isolation tested with Ambient conditions Ambient temperature during operation • horizontal installation, min. • horizontal installation, max. • vertical installation, min. • vertical installation, max. Altitude during operation relating to sea level • Installation altitude above sea level, max.	707 V DC (type test) 0 °C 60 °C 0 °C 40 °C 5 000 m; restrictions for installation altitudes > 2 000 m, see ET 200MP
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between backplane bus and interface Isolation Isolation tested with Ambient conditions Ambient temperature during operation • horizontal installation, min. • horizontal installation, max. • vertical installation, min. • vertical installation, max. Altitude during operation relating to sea level • Installation altitude above sea level, max. Decentralized operation to SIMATIC S7-300 to SIMATIC S7-400	707 V DC (type test) 0 °C 60 °C 0 °C 40 °C 5 000 m; restrictions for installation altitudes > 2 000 m, see ET 200MP system manual Yes Yes
between backplane bus and interface Isolation Isolation tested with Ambient conditions Ambient temperature during operation • horizontal installation, min. • horizontal installation, max. • vertical installation, min. • vertical installation, max. Altitude during operation relating to sea level • Installation altitude above sea level, max. Decentralized operation to SIMATIC S7-300 to SIMATIC S7-400 to SIMATIC S7-1500	707 V DC (type test) 0 °C 60 °C 0 °C 40 °C 5 000 m; restrictions for installation altitudes > 2 000 m, see ET 200MP system manual Yes Yes Yes Yes
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