SIEMENS

Data sheet

6ES7541-1AD00-0AB0



SIMATIC S7-1500, CM PTP RS232 HF Communication module for Serial connection RS232, Freeport, 3964 (R), USS, MODBUS RTU Master, Slave, 115200 Kbit/s, 9-pin D-sub connector

Figure similar

General information	
Product type designation	CM PtP RS 232 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)	50 mA; From the backplane bus
Power	
Power available from the backplane bus	0.75 W
Power loss	
Power loss, typ.	0.6 W
Address area	
Address space per module	
• Inputs	8 byte
Interface types	
RS 232	
Transmission rate, max.	115.2 kbit/s
Cable length, max.	15 m
 RS 232 auxiliary signals 	RTS, CTS, DTR, DSR, RI, DCD
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)	

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— 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.	1
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	
between backplane bus and interface	Yes
Isolation	
Isolation Isolation tested with	707 V DC (type test)
	707 V DC (type test)
Isolation tested with	707 V DC (type test)
Isolation tested with Ambient conditions	707 V DC (type test) 0 °C
Isolation tested with Ambient conditions Ambient temperature during operation	
Isolation tested with Ambient conditions Ambient temperature during operation • horizontal installation, min.	0 °C
Isolation tested with Ambient conditions Ambient temperature during operation • horizontal installation, min. • horizontal installation, max.	0 °C
Isolation tested with Ambient conditions Ambient temperature during operation • horizontal installation, min. • horizontal installation, max. • vertical installation, min.	0 °C 60 °C 0 °C
Isolation tested with Ambient conditions Ambient temperature during operation • horizontal installation, min. • horizontal installation, max. • vertical installation, min. • vertical installation, max.	0 °C 60 °C 0 °C
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	0 °C 60 °C 0 °C 40 °C 5 000 m; restrictions for installation altitudes > 2 000 m, see ET 200MP
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.	0 °C 60 °C 0 °C 40 °C 5 000 m; restrictions for installation altitudes > 2 000 m, see ET 200MP
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	0 °C 60 °C 0 °C 40 °C 5 000 m; restrictions for installation altitudes > 2 000 m, see ET 200MP system manual
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	0 °C 60 °C 0 °C 40 °C 5 000 m; restrictions for installation altitudes > 2 000 m, see ET 200MP system manual
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	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
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	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
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 to standard PROFINET controller	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
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 to standard PROFINET controller Dimensions	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 Yes Yes
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 to standard PROFINET controller Dimensions Width	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 Yes Yes
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