Data sheet

6ES7540-1AB00-0AA0



SIMATIC S7-1500, CM PTP RS422/485 BA Communication module for Serial connection RS422,RS485 Freeport, 3964 (R), USS, 19200 Kbit/s, 15-Pin D-sub socket

General information	
Product type designation	CM PtP RS 422 / 485 BA
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
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.	19.2 kbit/s
Cable length, max.	1 200 m
RS 422	
 Transmission rate, max. 	19.2 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.	1 kbyte
— Bits per character	7 or 8
Number of stop bits	1 or 2 bit

	None, even, odd, always 1, always 0, any
— Parity 3964 (R)	rtono, ovon, odd, diwayo i, diwayo o, any
— Telegram length, max.	1 kbyte
Bits per character	7 or 8
Number of stop bits	1 or 2 bit
— Parity	None, even, odd, always 1, always 0, any
Telegram buffer	Trong, Gron, Gua, amayo i, amayo o, any
Buffer memory for telegrams	2 kbyte
Number of telegrams which can be buffered	255
Interrupts/diagnostics/status information	
Diagnostics function	Yes
Alarms	163
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 tested with	707 V DC (type test)
Isolation tested with	
Ambient conditions	
Ambient conditions	
Ambient temperature during operation	
Ambient temperature during operation • horizontal installation, min.	0 °C
Ambient temperature during operation • horizontal installation, min. • horizontal installation, max.	0 °C
Ambient temperature during operation • horizontal installation, min. • horizontal installation, max. • vertical installation, min.	0 °C 60 °C 0 °C
Ambient temperature during operation • horizontal installation, min. • horizontal installation, max. • vertical installation, min. • vertical installation, max.	0 °C
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
Ambient temperature during operation • horizontal installation, min. • horizontal installation, max. • vertical installation, min. • vertical installation, max.	0 °C 60 °C 0 °C 40 °C 5 000 m; restrictions for installation altitudes > 2 000 m, see ET 200MP
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
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
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 system manual
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 Yes Yes
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
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
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
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
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 Height	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 The strictions for installation altitudes > 2 000 m, see ET 200MP system manual
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 Height Depth	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
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 Height Depth Weights	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 The strictions for installation altitudes > 2 000 m, see ET 200MP system manual
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