## **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	
<ul> <li>STEP 7 TIA Portal configurable/integrated from version</li> </ul>	V12 / V12
<ul> <li>STEP 7 configurable/integrated from version</li> </ul>	V5.5 SP2 with GSD file
<ul> <li>PROFIBUS from GSD version/GSD revision</li> </ul>	-1-
<ul> <li>PROFINET from GSD version/GSD revision</li> </ul>	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)	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	
<ul><li>Inputs</li></ul>	8 byte
Interface types	
RS 232	
<ul> <li>Transmission rate, max.</li> </ul>	115.2 kbit/s
<ul> <li>Cable length, max.</li> </ul>	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
<ul> <li>Number of stop bits</li> </ul>	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
<ul><li>Number of stop bits</li></ul>	1 or 2 bit
— Parity	None, even, odd, always 1, always 0, any
Modbus RTU master	
<ul><li>Address area</li></ul>	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	
<ul> <li>Buffer memory for telegrams</li> </ul>	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
<ul> <li>Receive RxD</li> </ul>	Yes; Yellow LED
<ul> <li>Transmit TxD</li> </ul>	Yes; Yellow LED
Potential separation	
between backplane bus and interface	Yes
between backplane bus and interface Isolation	Yes
	Yes 707 V DC (type test)
Isolation	
Isolation Isolation tested with Ambient conditions	
Isolation Isolation tested with	
Isolation Isolation tested with Ambient conditions Ambient temperature during operation	707 V DC (type test)
Isolation Isolation tested with  Ambient conditions  Ambient temperature during operation  • horizontal installation, min.	707 V DC (type test) 0 °C
Isolation Isolation tested with  Ambient conditions  Ambient temperature during operation  • horizontal installation, min.  • horizontal installation, max.	707 V DC (type test)  0 °C 60 °C
Isolation Isolation tested with  Ambient conditions  Ambient temperature during operation  • horizontal installation, min.  • horizontal installation, max.  • vertical installation, min.	707 V DC (type test)  0 °C 60 °C 0 °C
Isolation Isolation tested with  Ambient conditions  Ambient temperature during operation  • horizontal installation, min.  • horizontal installation, max.  • vertical installation, min.  • vertical installation, max.	707 V DC (type test)  0 °C 60 °C 0 °C
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	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
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
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	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
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	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
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
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
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  to standard PROFINET controller	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
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  to standard PROFINET controller  Dimensions  Width	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 Yes Yes
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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  to standard PROFINET controller  Dimensions  Width  Height  Depth	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 Yes Yes
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  to standard PROFINET controller  Dimensions  Width Height Depth  Weights	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 Yes Yes The strict of
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  to standard PROFINET controller  Dimensions  Width  Height  Depth	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 Yes Yes The strict of