SIEMENS

Data sheet

6ES7137-6AA00-0BA0

SIMATIC ET 200SP, CM PTP communication module for serial connection RS422, RS485 and RS232, Freeport, 3964 (R), USS, MODBUS RTU Master, Slave, 115200 Kbit/s



General information	
Product type designation	CM PtP
Firmware version	
• FW update possible	Yes
Product function	
● I&M data	Yes; I&M0 to I&M3
Engineering with	
 STEP 7 TIA Portal configurable/integrated as of version 	V12 / V12
 STEP 7 configurable/integrated as of version 	V5.5 SP2 with GSD file
 PROFIBUS as of GSD version/GSD revision 	GSD as of Revision 5
 PROFINET as of GSD version/GSD revision 	GSDML V2.3
Supply voltage	
Rated value (DC)	24 V
permissible range, lower limit (DC)	19.2 V
permissible range, upper limit (DC)	28.8 V
Reverse polarity protection	Yes
Input current	

Current consumption (rated value)	29 mA
Power loss	
Power loss, typ.	0.7 W
Address area Address space per module	
Inputs	8 byte
input	
1. Interface	
Interface types	
• RS 485	Yes
• RS 422	Yes
• RS 232	Yes
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
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	Yes
Protocols	
Integrated protocols	
Freeport	
— Telegram length, max.	2 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.	2 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	4 kbyte
 Number of telegrams which can be buffered 	255
-	
Interrupts/diagnostics/status information	
Diagnostics function	Yes
Alarms	No
Diagnostic alarm	Yes
Hardware interrupt	No
Diagnostic messages	
Wire-break	Yes
Diagnostics indication LED	
 Monitoring of the supply voltage (PWR-LED) 	Yes; green PWR LED
 for module diagnostics 	Yes; green/red DIAG LED
Receive RxD	Yes; green LED
● Transmit TxD	Yes; green LED
Potential separation	
between backplane bus and interface	Yes
Isolation	
Isolation tested with	707 V DC (type test)
Ambient conditions	
Ambient temperature during operation	-30 °C: From ES03
Ambient temperature during operation horizontal installation, min. 	-30 °C; From FS03
Ambient temperature during operationhorizontal installation, min.horizontal installation, max.	60 °C
 Ambient temperature during operation horizontal installation, min. horizontal installation, max. vertical installation, min. 	60 °C -30 °C; From FS03
 Ambient temperature during operation horizontal installation, min. horizontal installation, max. vertical installation, min. vertical installation, max. 	60 °C
 Ambient temperature during operation horizontal installation, min. horizontal installation, max. vertical installation, min. vertical installation, max. Altitude during operation relating to sea level 	60 °C -30 °C; From FS03 50 °C
 Ambient temperature during operation horizontal installation, min. horizontal installation, max. vertical installation, min. vertical installation, max. 	60 °C -30 °C; From FS03
 Ambient temperature during operation horizontal installation, min. horizontal installation, max. vertical installation, min. vertical installation, max. Altitude during operation relating to sea level 	60 °C -30 °C; From FS03 50 °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. 	60 °C -30 °C; From FS03 50 °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	60 °C -30 °C; From FS03 50 °C 2 000 m; On request: Installation altitudes greater than 2 000 m
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	60 °C -30 °C; From FS03 50 °C 2 000 m; On request: Installation altitudes greater than 2 000 m 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	60 °C -30 °C; From FS03 50 °C 2 000 m; On request: Installation altitudes greater than 2 000 m 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 S7-1200	60 °C -30 °C; From FS03 50 °C 2 000 m; On request: Installation altitudes greater than 2 000 m 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 S7-1200 to SIMATIC S7-1500	60 °C -30 °C; From FS03 50 °C 2 000 m; On request: Installation altitudes greater than 2 000 m 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 S7-1200 to SIMATIC S7-1500 to standard PROFINET controller	60 °C -30 °C; From FS03 50 °C 2 000 m; On request: Installation altitudes greater than 2 000 m 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 S7-1200 to SIMATIC S7-1500 to standard PROFINET controller Dimensions	60 °C -30 °C; From FS03 50 °C 2 000 m; On request: Installation altitudes greater than 2 000 m 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 S7-1200 to SIMATIC S7-1500 to standard PROFINET controller Dimensions Width	60 °C -30 °C; From FS03 50 °C 2 000 m; On request: Installation altitudes greater than 2 000 m Yes Yes Yes Yes Yes Yes 15 mm
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 S7-1200 to SIMATIC S7-1500 to standard PROFINET controller Dimensions Width Height	60 °C -30 °C; From FS03 50 °C 2 000 m; On request: Installation altitudes greater than 2 000 m Yes Yes Yes Yes Yes Yes Tas m 73 mm
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 S7-1200 to SIMATIC S7-1500 to standard PROFINET controller Dimensions Width Height Depth	60 °C -30 °C; From FS03 50 °C 2 000 m; On request: Installation altitudes greater than 2 000 m Yes Yes Yes Yes Yes Yes Tasm 73 mm

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