SIEMENS

Data sheet

6ES7137-6AA01-0BA0



SIMATIC ET 200SP, CM PTP communication module for serial connection RS-422, RS-485 and RS-232, freeport, 3964 (R), USS, MODBUS RTU master, slave, max. 250 Kbit/s, suitable for BU type A0, pack quantity: 1 unit

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General information	
Product type designation	CM PtP
Firmware version	
• FW update possible	Yes
usable BaseUnits	BU type A0
Product function	
• I&M data	Yes; I&M0 to I&M3
Engineering with	
 STEP 7 TIA Portal configurable/integrated from version 	STEP 7 V17 or higher
 STEP 7 configurable/integrated from version 	via GSD as of V5.6 HF4
 PROFIBUS from GSD version/GSD revision 	GSD as of Revision 5
 PROFINET from GSD version/GSD revision 	GSDML V2.34
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)	31 mA
Current consumption, max.	35 mA
Power loss	
Power loss, typ.	0.7 W
Address area	
Address space per module	
Inputs	8 byte; performance mode: 32 byte
Outputs	0 byte; performance mode: 32 byte
Hardware configuration	
Automatic encoding	Yes
 Mechanical coding element 	Yes
 Type of mechanical coding element 	type D
1. Interface	
Interface types	
• RS 485	Yes
• RS 422	Yes
• RS 232	Yes
Design of the connection	Push-in terminal
Interface types	
RS 232	
Transmission rate, max.	115.2 kbit/s

Cable length may	15 m
 Cable length, max. RS 232 auxiliary signals 	15 m RTS, CTS, DTR, DSR, RI, DCD
• RS 232 auxiliary signals RS 485	
Transmission rate, max.	250 kbit/s
Cable length, max.	1 200 m; 100 to 1200 m, depending on transmission speed
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; performance mode: receive data max. 24 byte and send data max. 30 byte
— 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; performance mode: receive data max. 24 byte and send data max. 30 byte
— 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 alarmHardware interrupt	Yes
Diagnoses	INU
Wire-break	Yes
Diagnostics indication LED	100
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	
 horizontal installation, min. 	-30 °C
 horizontal installation, max. 	60 °C
• vertical installation, min.	-30 °C
vertical installation, max.	50 °C
Altitude during operation relating to sea level	
 Installation altitude above sea level, max. 	5 000 m
Decentralized operation	
to SIMATIC S7-300	Yes
to SIMATIC S7-400	Yes
to SIMATIC S7-1200	Yes
to SIMATIC S7-1500	Yes

to standard PROFINET controller	Yes	
Dimensions		
Width	15 mm	
Height	73 mm	
Height Depth	58 mm	
Weights		
Weight, approx.	30 g	
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