## 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

	unit	
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		
<ul> <li>STEP 7 TIA Portal configurable/integrated from version</li> </ul>	STEP 7 V17 or higher	
<ul> <li>STEP 7 configurable/integrated from version</li> </ul>	via GSD as of V5.6 HF4	
<ul> <li>PROFIBUS from GSD version/GSD revision</li> </ul>	GSD as of Revision 5	
<ul> <li>PROFINET from GSD version/GSD revision</li> </ul>	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	
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, max.	15 m	
RS 232 auxiliary signals	RTS, CTS, DTR, DSR, RI, DCD	
RS 485		
<ul> <li>Transmission rate, max.</li> </ul>	250 kbit/s	
Cable length, max.	1 200 m; 100 to 1200 m, depending on transmission speed	
RS 422		
<ul> <li>Transmission rate, max.</li> </ul>	115.2 kbit/s	
• Cable length, max.	1 200 m	
4-wire full duplex connection	Yes	
<ul> <li>4-wire multipoint connection</li> </ul>	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
<ul> <li>Number of telegrams which can be buffered</li> </ul>	255
Interrupts/diagnostics/status information	
Diagnostics function	Yes
Alarms	
Diagnostic alarm	Yes
Hardware interrupt	No
Diagnoses	
Wire-break	Yes
Diagnostics indication LED	
Monitoring of the supply voltage (PWR-LED)	Yes; green PWR LED
<ul> <li>for module diagnostics</li> </ul>	Yes; green/red DIAG LED
Receive RxD	Yes; green LED
Transmit TxD	Yes; green LED
Potential separation	Vee
between backplane bus and interface	Yes
Isolation	
Isolation tested with	707 V DC (type test)
Ambient conditions	
Ambient temperature during operation	
<ul> <li>horizontal installation, min.</li> </ul>	-30 °C
<ul> <li>horizontal installation, max.</li> </ul>	60 °C
<ul> <li>vertical installation, min.</li> </ul>	-30 °C
<ul> <li>vertical installation, max.</li> </ul>	50 °C
Altitude during operation relating to sea level	
<ul> <li>Installation altitude above sea level, max.</li> </ul>	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
Depth	58 mm
Weights	
	30 g
Weight, approx.	30 g

last modified: