## 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

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
Hardware configuration	
Automatic encoding	Yes
<ul> <li>Mechanical coding element</li> </ul>	Yes
<ul> <li>Type of mechanical coding element</li> </ul>	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, max.	15 m

RS 232 auxiliary signals	RTS, CTS, DTR, DSR, RI, DCD
RS 485	K13, C13, D1K, D3K, KI, D6D
Transmission rate, max.	250 kbit/s
Cable length, max.	1 200 m; 100 to 1200 m, depending on transmission speed
RS 422	1 200 m, 100 to 1200 m, depending on transmission speed
Transmission rate, max.	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
- max. number of devices	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	
<ul> <li>Monitoring of the supply voltage (PWR-LED)</li> </ul>	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	
between backplane bus and interface	Yes
Isolation	
Isolation tested with	707 V DC (type test)
Isolation tested with Ambient conditions	707 V DC (type test)
	707 V DC (type test)
Ambient conditions	707 V DC (type test) -30 °C
Ambient conditions Ambient temperature during operation	
Ambient conditions         Ambient temperature during operation         • horizontal installation, min.	-30 °C
Ambient conditions         Ambient temperature during operation         • horizontal installation, min.         • horizontal installation, max.	-30 °C 60 °C
Ambient conditions         Ambient temperature during operation         • horizontal installation, min.         • horizontal installation, max.         • vertical installation, min.	-30 °C 60 °C -30 °C
Ambient conditions         Ambient temperature during operation         • horizontal installation, min.         • horizontal installation, max.         • vertical installation, min.         • vertical installation, max.	-30 °C 60 °C -30 °C
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	-30 °C 60 °C -30 °C 50 °C
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.	-30 °C 60 °C -30 °C 50 °C
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	-30 °C 60 °C -30 °C 50 °C 5 000 m
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	-30 °C 60 °C -30 °C 50 °C 5 000 m
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	-30 °C 60 °C -30 °C 50 °C 5 000 m Yes Yes
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 S7-1200	-30 °C 60 °C -30 °C 50 °C 5 000 m Yes Yes Yes

Dimensions	
Width	15 mm
Height Depth	73 mm
Depth	58 mm
Weights	
Weight, approx.	30 g

last modified:

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