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

Figure similar

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	
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	
 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
Alarma	
Alarms	
Diagnostic alarm	Yes
Diagnostic alarm Hardware interrupt	Yes No
Diagnostic alarmHardware interruptDiagnoses	No
 Diagnostic alarm Hardware interrupt Diagnoses Wire-break 	
 Diagnostic alarm Hardware interrupt Diagnoses Wire-break Diagnostics indication LED 	No Yes
Diagnostic alarm Hardware interrupt Diagnoses Wire-break Diagnostics indication LED Monitoring of the supply voltage (PWR-LED)	Yes Yes; green PWR LED
Diagnostic alarm Hardware interrupt Diagnoses Wire-break Diagnostics indication LED Monitoring of the supply voltage (PWR-LED) for module diagnostics	Yes: green PWR LED Yes: green/red DIAG LED
Diagnostic alarm Hardware interrupt Diagnoses Wire-break Diagnostics indication LED Monitoring of the supply voltage (PWR-LED) for module diagnostics Receive RxD	Yes Yes; green PWR LED Yes; green/red DIAG LED Yes; green LED
Diagnostic alarm Hardware interrupt Diagnoses Wire-break Diagnostics indication LED Monitoring of the supply voltage (PWR-LED) for module diagnostics Receive RxD Transmit TxD	Yes: green PWR LED Yes: green/red DIAG LED
Diagnostic alarm Hardware interrupt Diagnoses Wire-break Diagnostics indication LED Monitoring of the supply voltage (PWR-LED) for module diagnostics Receive RxD Transmit TxD Potential separation	Yes; green PWR LED Yes; green/red DIAG LED Yes; green LED Yes; green LED
Diagnostic alarm Hardware interrupt Diagnoses Wire-break Diagnostics indication LED Monitoring of the supply voltage (PWR-LED) for module diagnostics Receive RxD Transmit TxD Potential separation between backplane bus and interface	Yes Yes; green PWR LED Yes; green/red DIAG LED Yes; green LED
Diagnostic alarm Hardware interrupt Diagnoses Wire-break Diagnostics indication LED Monitoring of the supply voltage (PWR-LED) for module diagnostics Receive RxD Transmit TxD Potential separation between backplane bus and interface Isolation	Yes Yes; green PWR LED Yes; green/red DIAG LED Yes; green LED Yes; green LED Yes
Diagnostic alarm Hardware interrupt Diagnoses Wire-break Diagnostics indication LED Monitoring of the supply voltage (PWR-LED) for module diagnostics Receive RxD Transmit TxD Potential separation between backplane bus and interface Isolation Isolation tested with	Yes; green PWR LED Yes; green/red DIAG LED Yes; green LED Yes; green LED
Diagnostic alarm Hardware interrupt Diagnoses Wire-break Diagnostics indication LED Monitoring of the supply voltage (PWR-LED) for module diagnostics Receive RxD Transmit TxD Potential separation between backplane bus and interface Isolation Isolation tested with Ambient conditions	Yes Yes; green PWR LED Yes; green/red DIAG LED Yes; green LED Yes; green LED Yes
Diagnostic alarm Hardware interrupt Diagnoses Wire-break Diagnostics indication LED Monitoring of the supply voltage (PWR-LED) for module diagnostics Receive RxD Transmit TxD Potential separation between backplane bus and interface Isolation Isolation tested with Ambient conditions Ambient temperature during operation	Yes Yes; green PWR LED Yes; green/red DIAG LED Yes; green LED Yes; green LED Yes 707 V DC (type test)
Diagnostic alarm Hardware interrupt Diagnoses Wire-break Diagnostics indication LED Monitoring of the supply voltage (PWR-LED) for module diagnostics Receive RxD Transmit TxD Potential separation between backplane bus and interface Isolation Isolation tested with Ambient conditions Ambient temperature during operation horizontal installation, min.	Yes Yes; green PWR LED Yes; green/red DIAG LED Yes; green LED Yes; green LED Yes 707 V DC (type test)
Diagnostic alarm Hardware interrupt Diagnoses Wire-break Diagnostics indication LED Monitoring of the supply voltage (PWR-LED) for module diagnostics Receive RxD Transmit TxD Potential separation between backplane bus and interface Isolation Isolation tested with Ambient conditions Ambient temperature during operation horizontal installation, min. horizontal installation, max.	Yes; green PWR LED Yes; green/red DIAG LED Yes; green LED Yes; green LED Yes 707 V DC (type test)
Diagnostic alarm Hardware interrupt Diagnoses Wire-break Diagnostics indication LED Monitoring of the supply voltage (PWR-LED) for module diagnostics Receive RxD Transmit TxD Potential separation between backplane bus and interface Isolation Isolation tested with Ambient conditions Ambient temperature during operation horizontal installation, min. horizontal installation, max. vertical installation, min.	Yes: green PWR LED Yes; green/red DIAG LED Yes; green LED Yes; green LED Yes; green LED Yes 707 V DC (type test) -30 °C 60 °C -30 °C
Diagnostic alarm Hardware interrupt Diagnoses Wire-break Diagnostics indication LED Monitoring of the supply voltage (PWR-LED) for module diagnostics Receive RxD Transmit TxD Potential separation between backplane bus and interface Isolation Isolation tested with Ambient conditions Ambient temperature during operation horizontal installation, min. horizontal installation, max. vertical installation, min. vertical installation, max.	Yes; green PWR LED Yes; green/red DIAG LED Yes; green LED Yes; green LED Yes 707 V DC (type test)
Diagnostic alarm Hardware interrupt Diagnoses Wire-break Diagnostics indication LED Monitoring of the supply voltage (PWR-LED) for module diagnostics Receive RxD Transmit TxD Potential separation between backplane bus and interface Isolation Isolation tested with Ambient conditions Ambient temperature during operation horizontal installation, min. horizontal installation, max. vertical installation, max. Vertical installation, max. Altitude during operation relating to sea level	Yes: green PWR LED Yes; green/red DIAG LED Yes; green LED Yes; green LED Yes; green LED Yes 707 V DC (type test) -30 °C 60 °C -30 °C
Diagnostic alarm Hardware interrupt Diagnoses Wire-break Diagnostics indication LED Monitoring of the supply voltage (PWR-LED) for module diagnostics Receive RxD Transmit TxD Potential separation between backplane bus and interface Isolation Isolation tested with Ambient conditions Ambient temperature during operation horizontal installation, min. horizontal installation, max. vertical installation, min. vertical installation, max.	Yes: green PWR LED Yes; green/red DIAG LED Yes; green LED Yes; green LED Yes; green LED Yes 707 V DC (type test) -30 °C 60 °C -30 °C
Diagnostic alarm Hardware interrupt Diagnoses Wire-break Diagnostics indication LED Monitoring of the supply voltage (PWR-LED) for module diagnostics Receive RxD Transmit TxD Potential separation between backplane bus and interface Isolation Isolation tested with Ambient conditions Ambient temperature during operation horizontal installation, min. horizontal installation, max. vertical installation, max. Vertical installation, max. Altitude during operation relating to sea level	Yes Yes; green PWR LED Yes; green/red DIAG LED Yes; green LED Yes; green LED Yes 707 V DC (type test) -30 °C 60 °C -30 °C 50 °C
Diagnostic alarm Hardware interrupt Diagnoses Wire-break Diagnostics indication LED Monitoring of the supply voltage (PWR-LED) for module diagnostics Receive RxD Transmit TxD Potential separation between backplane bus and interface Isolation Isolation tested with Ambient conditions Ambient temperature during operation horizontal installation, min. horizontal installation, max. vertical installation, min. vertical installation, max. Installation operation relating to sea level Installation altitude above sea level, max.	Yes Yes; green PWR LED Yes; green/red DIAG LED Yes; green LED Yes; green LED Yes 707 V DC (type test) -30 °C 60 °C -30 °C 50 °C
Diagnostic alarm Hardware interrupt Diagnoses Wire-break Diagnostics indication LED Monitoring of the supply voltage (PWR-LED) for module diagnostics Receive RxD Transmit TxD Potential separation between backplane bus and interface Isolation Isolation tested with Ambient conditions Ambient temperature during operation horizontal installation, min. horizontal installation, min. vertical installation, min. vertical installation, max. Isolation tested with Altitude during operation relating to sea level Installation altitude above sea level, max. Decentralized operation	Yes; green PWR LED Yes; green/red DIAG LED Yes; green LED Yes; green LED Yes 707 V DC (type test) -30 °C 60 °C -30 °C 50 °C
Diagnostic alarm Hardware interrupt Diagnoses Wire-break Diagnostics indication LED Monitoring of the supply voltage (PWR-LED) for module diagnostics Receive RxD Transmit TxD Potential separation between backplane bus and interface Isolation Isolation tested with Ambient conditions Ambient temperature during operation horizontal installation, min. horizontal installation, min. vertical installation, max. Vertical installation, max. Altitude during operation relating to sea level Installation altitude above sea level, max. Decentralized operation to SIMATIC S7-300	Yes Yes; green PWR LED Yes; green/red DIAG LED Yes; green LED Yes; green LED Yes 707 V DC (type test) -30 °C 60 °C -30 °C 50 °C 5 000 m
Diagnostic alarm Hardware interrupt Diagnoses Wire-break Diagnostics indication LED Monitoring of the supply voltage (PWR-LED) for module diagnostics Receive RxD Transmit TxD Potential separation between backplane bus and interface Isolation Isolation tested with Ambient conditions Ambient temperature during operation horizontal installation, min. horizontal installation, min. vertical installation, max. vertical installation, max. Isolation during operation relating to sea level Installation altitude above sea level, max. Decentralized operation to SIMATIC S7-300 to SIMATIC S7-400	Yes; green PWR LED Yes; green/red DIAG LED Yes; green LED Yes; green LED Yes 707 V DC (type test) -30 °C 60 °C -30 °C 5 000 m

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

last modified: 5/24/2021 🖸