



Figure similar

SIPLUS ET 200SP CM PTP based on 6ES7137-6AA01-0BA0 with conformal coating, -40...+70 °C, communications 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,

General information	
Product type designation	CM PtP
Firmware version	
• FW update possible	Yes
based on	<a href="#">6ES7137-6AA01-0BA0</a>
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	see entry ID: 109746275
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
- max. number of devices 32

#### protocols / Modbus RTU device / header

- 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

- Diagnostic alarm Yes
- Hardware interrupt No

#### Diagnoses

- 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)

## Standards, approvals, certificates

### Ecological footprint

- environmental product declaration Yes

#### Global warming potential

- global warming potential, (total) [CO2 eq] 25.2 kg
- global warming potential, (during production) [CO2 eq] 6.15 kg
- global warming potential, (during operation) [CO2 eq] 19.4 kg
- global warming potential, (after end of life cycle) [CO2 eq] -0.289 kg

## Ambient conditions

### Ambient temperature during operation

- horizontal installation, min. -40 °C; = Tmin (incl. condensation/frost)
- horizontal installation, max. 70 °C; = Tmax
- vertical installation, min. -40 °C; = Tmin
- vertical installation, max. 50 °C; = Tmax

### Altitude during operation relating to sea level

- Installation altitude above sea level, max. 5 000 m
- Ambient air temperature-barometric pressure-altitude Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... (Tmax

		- 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax -20 K) at 658 hPa ... 540 hPa (+3 500 m ... +5 000 m)	
Relative humidity			
● With condensation, tested in accordance with IEC 60068-2-38, max.		100 %; RH incl. condensation / frost (no commissioning in bedewed state), horizontal installation	
Resistance			
Coolants and lubricants			
— Resistant to commercially available coolants and lubricants		Yes; Incl. diesel and oil droplets in the air	
Use in stationary industrial systems			
— to biologically active substances according to EN 60721-3-3		Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request	
— to chemically active substances according to EN 60721-3-3		Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *	
— to mechanically active substances according to EN 60721-3-3		Yes; Class 3S4 incl. sand, dust, *	
— Against mechanical environmental conditions acc. to EN 60721-3-3		Yes; Class 3M8 using the SIPLUS Mounting Kit ET 200SP (6AG1193-6AA00-0AA0)	
Use on land craft, rail vehicles and special-purpose vehicles			
— Against mechanical environmental conditions acc. to EN 60721-3-5		Yes; Class 5M2 using the SIPLUS Mounting Kit ET 200SP (6AG1193-6AA00-0AA0)	
— against mechanical environmental conditions in agriculture acc. to ISO 15003		Yes; level 1 (Location LE) using the SIPLUS Mounting Kit ET 200SP (6AG1193-6AA00-0AA0)	
Use on ships/at sea			
— to biologically active substances according to EN 60721-3-6		Yes; Class 6B2 mold, fungal and dry rot spores (excluding fauna)	
— to chemically active substances according to EN 60721-3-6		Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *	
— to mechanically active substances according to EN 60721-3-6		Yes; Class 6S3 incl. sand, dust; *	
— Against mechanical environmental conditions acc. to EN 60721-3-6		Yes; Class 6M4 using the SIPLUS Mounting Kit ET 200SP (6AG1193-6AA00-0AA0)	
Usage in industrial process technology			
— Against chemically active substances acc. to EN 60654-4		Yes; Class 3 (excluding trichlorethylene)	
— Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04		Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)	
Remark			
— Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04		* The supplied plug covers must remain in place over the unused interfaces during operation!	
Conformal coating			
● Coatings for printed circuit board assemblies acc. to EN 61086		Yes; Class 2 for high reliability	
● Protection against fouling acc. to EN 60664-3		Yes; Type 1 protection	
● Military testing according to MIL-I-46058C, Amendment 7		Yes; Discoloration of coating possible during service life	
● Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A		Yes; Conformal coating, Class A	
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			
Weight, approx.		30 g	
Classifications			
		Version	Classification
		eClass	14
		eClass	12
			27-24-26-08
			27-24-26-08

eClass	9.1	27-24-26-08
eClass	9	27-24-26-08
eClass	8	27-24-26-08
eClass	7.1	27-24-26-08
eClass	6	27-24-26-08
ETIM	9	EC001604
ETIM	8	EC001604
ETIM	7	EC001604
IDEA	4	3564
UNSPSC	15	32-15-17-05

Approvals / Certificates

General Product Approval	EMV
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[Miscellaneous](#)

[Manufacturer Declaration](#)



For use in hazardous locations	Marine / Shipping	Environment
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[CCC-Ex](#)



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