SIEMENS

Data sheet

6AG1541-1AB00-7AB0



SIPLUS S7-1500 CM PTP RS-422/485 based on 6ES7541-1AB00-0AB0 with conformal coating, -40...+70 °C, start up -25 °C, communications module for serial connection RS-422 and RS-485, Freeport, 3964 (R), USS, MODBUS RTU master, slave, 115200 Kbit/s, 15-Pin D-sub socket

Figure similar

General information	
Product type designation	CM PtP RS 422 / 485 HF
Product function	
• I&M data	Yes; I&M 0
Fast startup	Yes
Engineering with	
 STEP 7 TIA Portal configurable/integrated from version 	see entry ID: 109746275
Installation type/mounting	
Rail mounting	Yes; S7-1500 mounting rail
Supply voltage	
Design of the power supply	system power supply
Input current	
Current consumption (rated value)	33 mA; From the backplane bus
Power	
Power available from the backplane bus	0.65 W
Power loss	
Power loss, typ.	0.6 W
Address area	
Address space per module	
Inputs	8 byte
Interface types	
RS 485	
 Transmission rate, max. 	115.2 kbit/s
Cable length, max.	1 200 m
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 	No
Protocols	
Integrated protocols	
Freeport	
— Telegram length, max.	4 kbyte
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)	4 khuto
— Telegram length, max.	4 kbyte

— 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	4 to 247, outpended 4 to CEE2E
— Address area	1 to 247, extended 1 to 65535
Telegram buffer	9 khyta
 Buffer memory for telegrams Number of telegrams which can be buffered 	8 kbyte 255
Interrupts/diagnostics/status information	200
	Y.
Diagnostics function	Yes
Alarms Diagnostic alarm	Yes
Hardware interrupt	No
Diagnoses	INU .
Wire-break	Yes
Diagnostics indication LED	
RUN LED	Yes; green LED
Receive RxD	Yes; Yellow LED
Transmit TxD	Yes; Yellow LED
Potential separation	
between backplane bus and interface	Yes
Isolation	500.1/
Isolation tested with	500 V
Ambient conditions	
Ambient temperature during operation	
 horizontal installation, min. 	-40 °C; = Tmin (incl. condensation/frost); start-up @ -25 °C
 horizontal installation, max. 	70 °C
• vertical installation, min.	-40 °C; = Tmin; Startup @ -25 °C
vertical installation, max.	40 °C
Ambient temperature during storage/transportation	40.10
• min.	-40 °C
Max. Altitude during exerction relating to each lovel	70 °C
Altitude during operation relating to sea level Installation altitude above sea level, max. 	5 000 m
Ambient air temperature-barometric pressure-	Tmin Tmax at 1 140 hPa 795 hPa (-1 000 m +2 000 m) // Tmin
altitude	(Tmax - 10 K) at 795 hPa 658 hPa (+2 000 m +2 500 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 	100 %; RH incl. condensation/frost (no commissioning under
60068-2-38, max.	condensation conditions)
Resistance	
Coolants and lubricants	Vee: Incl. diesel and eil dreplets in the sir
 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	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of
EN 60721-3-3	fauna); Class 3B3 on request
 to chemically active substances according to 	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52
EN 60721-3-3	(severity degree 3); *
 to mechanically active substances according to EN 60721 3 3 	Yes; Class 3S4 incl. sand, dust, *
EN 60721-3-3 Use on ships/at sea	
— to biologically active substances according to	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on
EN 60721-3-6	request
 — 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; *
Usage in industrial process technology	
 Against chemically active substances acc. to EN 60654-4 	Yes; Class 3 (excluding trichlorethylene)
 Environmental conditions for process, 	Yes; Level GX group A/B (excluding trichlorethylene; harmful gas

measuring and control systems acc. to ANSI/ISA- 71.04	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 S7-1500	Yes
to standard PROFINET controller	Yes
Dimensions	
Width	35 mm
Height	147 mm
Depth	127 mm
Weights	
Weight, approx.	0.22 kg