SIEMENS

Data sheet 6AG1803-4BA00-7AA0

Product type designation

SIPLUS NET TIM 4R-IE DNP3

SIPLUS NET TIM 4R-IE DNP3 -25...+70 °C with conformal coating based on 6NH7803-4BA00-0AA0 . TIM 4R-IE DNP3 communication module for SIMATIC S7-300, "S7-400, PC; with two" RS232/RS485 interfaces for DNP3 communication via classic WANs and two RJ45 interfaces for DNP3 communication via IP- based networks (WAN or LAN)

Figure similar

Transmission rate	
Transfer rate	
• for Industrial Ethernet	10 ... 100 Mbit/s
• acc. to RS 232	9600 ... 115200 bit/s
Interfaces	
Number of interfaces / acc. to Industrial Ethernet	2
Number of electrical connections	
• for external data transmission / acc. to RS 232	2
• for power supply	1
Type of electrical connection	
• of Industrial Ethernet interface	RJ45 port
• at interface 1 / for external data transmission	9 pin Sub-D-connector, RS232 switchable to RS485
• at interface 2 / for external data transmission	9-pole D-sub connector, RS232 can be switched to RS485
• for power supply	2-pole plugable terminal block
design of the removable storage / C-PLUG	Yes

Supply voltage, current consumption, power loss	
Type of voltage / of the supply voltage	DC
Supply voltage	24 V
Supply voltage	20.4 ... 28.8 V
Supply voltage / external / at DC / Rated value	24 V
Supply voltage / external / at DC / rated value	20.4 ... 28.8 V
Consumed current	
• from backplane bus / at DC / at 24 V / maximum	0.2 A
• from external supply voltage / at DC / at 24 V / maximum	0.17 A
Power loss [W]	4.6 W
Product extension / optional / Backup battery	Yes
Type of battery	Lithium AA / 3.6 V / 2.3 Ah
Backup current	
• typical	100 µA
• maximum	160 µA

Permitted ambient conditions	
Ambient temperature	
• during operation	-25 ... +70 °C
• during storage	-40 ... +70 °C
• during transport	-40 ... +70 °C
Ambient condition / relating to ambient temperature - air pressure - installation altitude	-25 ... +70°C at 1080 hPa ... 795 hPa (-1000 m ... +2000 m) // -25 ... +60°C at 795 hPa ... 658 hPa (+2000 m ... +3500 m) // -25 ... +50°C at 658 hPa ... 540 hPa (+3500 m ... +5000 m)
Relative humidity / with condensation / maximum	100 %; r.F., incl. condensation/frost permitted (no commissioning in bedewed state)
Resistance to biologically active substances	
• conformity acc. to EN 60721-3-3	Yes; Compliance with EN 60721-3-3, Class 3B2 mold, fungus, and sponge spores (except fauna). The supplied plug covers must remain in place over the unused interfaces during operation!
Resistance to chemically active substances	
• conformity acc. to EN 60721-3-3	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3). The supplied plug covers must remain in place over the unused interfaces during operation!
Resistance to mechanically active substances	
• conformity acc. to EN 60721-3-3	Yes; Class 3S4 incl. sand, dust. The supplied plug covers must remain in place over the unused interfaces during operation!
Protection class IP	IP20

Design, dimensions and weight	
Module format	Compact module S7-300 double width
Width	80 mm
Height	125 mm
Depth	120 mm

Net weight	0.4 kg

Product properties, functions, components / general	
Number of units	
• Note	Number of TIMs per S7-300 / S7-400: 1
Wire length	
• with RS 232 interface / maximum	6 m
• with RS 485 interface / maximum	30 m

Performance data / S7 communication	
Number of possible connections / for S7 communication	
• maximum	5
• with PG connections / maximum	2
• with OP connections / maximum	1
• Note	only via LAN
Service	
• PG/OP communication	Yes

Performance data / telecontrol	
Suitability for use	
• Node station	Yes
• substation	Yes
• TIM control center	Yes
Protocol / is supported	
• DNP3	Yes
• Modbus RTU	Yes
Product function / data buffering if connection is aborted	Yes; 200,000 data points with one master
Number of DNP3 masters	
• for Ethernet / maximum	8
• with RS 232 interface / maximum	1
Number of Modbus RTU slaves / maximum	1
Configuration software	
• required	SINAUT ST7 ES
Storage location / of TIM configuration data	on the CPU or TIM

Product functions / Time	
Product component / Hardware real-time clock	Yes
Product feature / Hardware real-time clock w. battery backup	Yes
Accuracy / of the hardware real-time clock / per day / maximum	4 s
time synchronization	
• from NTP-server	Yes

Further Information / Internet Links

Internet-Link	
• to website: Selector SIMATIC NET SELECTION TOOL	http://www.siemens.com/snst
• to website: Industrial communication	http://www.siemens.com/simatic-net
• to website: Industry Mall	https://mall.industry.siemens.com
• to website: Information and Download Center	http://www.siemens.com/industry/infocenter
• to website: Image database	http://automation.siemens.com/bilddb
• to website: CAx Download Manager	http://www.siemens.com/cax
• to website: Industry Online Support	https://support.industry.siemens.com

Security information

Security information	Siemens provides products and solutions with industrial security functions that support the secure operation of plants, solutions, machines, equipment and/or networks. They are important components in a holistic industrial security concept. With this in mind, Siemens' products and solutions undergo continuous development. Siemens recommends strongly that you regularly check for product updates. For the secure operation of Siemens products and solutions, it is necessary to take suitable preventive action(e.g. cell protection concept) and integrate each component into a holistic, state-of-the-art industrial security concept. Third-party products that may be in use should also be considered. For more information about industrial security, visit http://www.siemens.com/industrialsecurity. To stay informed about product updates as they occur, sign up for a product-specific newsletter. For more information, visit http://support.automation.siemens.com. (V3.4)
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