SIEMENS

Data sheet 6AG1803-4BA00-7AA0

product type designation

Figure similar

SIPLUS NET TIM 4R-IE DNP3

SIPLUS NET TIM 4R-IE DNP3 based on 6NH7803-4BA00-0AA0 with conformal coating, -25…+70 °C, TIM 4R-IE DNP3 communication module for SIMATIC S7-300, S7-400, PC; with two RS-232/RS-485 interfaces for DNP3 communication via classic WANs and two RJ45 interfaces for DNP3 communication via IP- based networks (WAN or LAN)

transfer 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
type of electrical connection	
● 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
ambient conditions	
ambient temperature	
● during operation	-25 ... +70 °C
● during storage	-40 ... +70 °C

● during transport	-40 ... +70 °C
installation altitude / at height above sea level / maximum	5000 m
ambient condition / relating to ambient temperature - air pressure - installation 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 / acc. to IEC 60068-2-38 / maximum	100 %; RH including condensation/frost (no commissioning when condensation is present), horizontal installation
chemical resistance / to commercially available cooling lubricants	Yes; incl. airborne diesel and oil droplets
resistance to biologically active substances	
● conformity acc. to EN 60721-3-3	Yes; Class 3B2 mold and fungal spores (excluding fauna), Class 3B3 on request
● conformity acc. to EN 60721-3-6	Yes; Class 6B2 mold, fungal and dry rot spores (excluding fauna)
resistance to chemically active substances	
● conformity acc. to EN 60721-3-3	Yes; Class 3C4 (RH < 75 %) incl. salt spray in accordance with EN 60068-2-52 (Severity 3). The supplied plug covers must remain in place on the unused interfaces during operation.
● conformity acc. to EN 60721-3-6	Yes
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.
● conformity acc. to EN 60721-3-6	Yes; Class 6S3 incl. sand, dust. The supplied plug covers must remain in place over the unused interfaces during operation.
coating / for equipped printed circuit board / acc. to EN 61086	Yes; Class 2 for high availability
type of coating / protection against pollution according to EN 60664-3	Yes; Protection of the type 1
type of test / of the coating / acc. to MIL-I-46058C	Yes; Coating discoloration during service life possible
product conformity / of the coating / Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies acc. to IPC-CC-830A	Yes; Conformal coating, class A
protection class IP	IP20
design, dimensions and weights	
module format	Compact module S7-300 double width
width	80 mm
height	125 mm
depth	120 mm
net weight	0.4 kg
product features, product functions, product 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; only via LAN
● with PG connections / maximum	2
● with OP connections / maximum	1
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
product functions / management, configuration, engineering	
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 web page: selection aid TIA 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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