SIEMENS

Data sheet

6AG1800-3BA00-7AA0

product type designation



SIPLUS SINAUT ST7, TIM 3V-IE

SIPLUS ST7 TIM 3V-IE -25...+70 $^{\circ}$ C with conformal coating based on 6NH7800-3BA00 . communication module for "SIMATIC S7-300 and C7; with" one RS232 interface for SINAUT communication via classic WAN and an RJ45 interface for SINAUT communication via an IP-based network (WAN or LAN)

transfer rate	
transfer rate	
 for Industrial Ethernet 	10 100 Mbit/s
• acc. to RS 232	50 38400 bit/s
interfaces	
number of interfaces / acc. to Industrial Ethernet	1
number of electrical connections	
• for external data transmission / acc. to RS 232	1
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)
• for power supply	2-pole plugable terminal block
design of the removable storage / C-PLUG	No
supply voltage current consumption power loss	



DC

type of voltage / of the supply voltage

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
relative symmetrical tolerance / at DC	
● at 5 V	5 %
relative positive tolerance / at DC / at 24 V	5 %
relative negative tolerance / at DC / at 24 V	5 %
consumed current	
from backplane bus / at DC / at 24 V / maximum	0.2 A
• from external supply voltage / at DC / at 24 V / maximum	0.2 A
power loss [W]	5.8 W
product extension / optional / backup battery	No

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	Yes; Conformal coating, class A
Performance of Electrical Insulating Compound for	
Printed Board Assemblies acc. to IPC-CC-830A	
protection class IP	IP20
design, dimensions and weights	
module format	Compact module S7-300 single width
width	40 mm
height	125 mm
depth	120 mm
net weight	0.2 kg
product features, product functions, product compo	nents / general
number of units	
• per CPU / maximum	1
wire length	
• with RS 232 interface / maximum	6 m
performance data / S7 communication	
number of possible connections / for S7	
communication	
• maximum	12
with PG connections / maximum	4
with OP connections / maximum	8
service	
 SINAUT ST7 via S7 communication 	Yes
 PG/OP communication 	Yes
performance data / multi-protocol mode	
number of active connections / with multi-protocol	12
mode	
performance data / telecontrol	
suitability for use	
• node station	No
substation	Yes
TIM control center	Yes
protocol / is supported	
SINAUT ST1 protocol	Yes
SINAUT ST1 protocolSINAUT ST7 protocol	Yes Yes



storage capacity	
• note	TD7onCPU: at least 20 KB, actual requirement determined by data volume and functional scope TD7onTIM: 0 bytes in most favorable case
product feature / buffered message frame memory	No
transmission format	
• for SINAUT ST1 protocol with polling / 11 bit	Yes
 for SINAUT ST1 protocol with spontaneous / 10-bit or 11-bit 	Yes
 for SINAUT ST7 protocol with multi-master polling / 10-bit 	Yes
 for SINAUT ST7 protocol with polling or spontaneous / 10-bit or 11-bit 	Yes
operating mode for scanning of data transmission	
 with dedicated line/radio link / with SINAUT ST1 protocol 	Polling, polling with time slot procedure
 with dedicated line/radio link / with SINAUT ST7 protocol 	Polling, polling with time slot procedure, multi-master polling with time slot procedure
 with dial-up network / with SINAUT ST1 protocol 	spontaneous
with dial-up network / with SINAUT ST7 protocol	spontaneous
hamming distance	
• for SINAUT ST1 protocol	4
• for SINAUT ST7 protocol	4

product functions / management, configuration, engineering		
configuration software		
• required	SINAUT ST7 ES	
 for CPU configuring / required / SINAUT TD7 block library for CPU 	Yes	
 for PG configuring / required / SINAUT ST7 configuration software for PG 	Yes	
storage location / of TIM configuration data	on the CPU	

product functions / security	
operating mode / Virtual Private Network (VPN)	Yes
type of authentication / with Virtual Private Network / PSK	Yes

further information / internet-Links

• to website: Industry Mall

• to website: Selector TIA Selection Tool	
• to website: Industrial communication	

• to website: Information and Download Center

http://www.siemens.com/snst

http://www.siemens.com/simatic-net

http://www.siemens.com/industrial-controls/mall

http://www.siemens.com/automation/net/catalog



Internet-Link

• to website: Image database

• to website: CAx Download Manager

• to website: Industry Online Support

http://automation.siemens.com/bilddb

http://www.siemens.com/cax

http://support.automation.siemens.com

security information

security information

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