

product type designation



SIPLUS SINAUT ST7, TIM 3V-IE

SIPLUS NET TIM 3V-IE based on 6NH7800-3BA00 with conformal coating, - 25...+70 °C, communications module for SIMATIC S7-300 and C7; with one RS-232 interface for SINAUT communication via a 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
• according to RS 232	50 ... 38400 bit/s

interfaces

number of interfaces / according to Industrial Ethernet	1
number of electrical connections	
• for external data transmission / according 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

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
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 / according 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 according to EN 60721-3-3	Yes; Class 3B2 mold and fungal spores (excluding fauna), Class 3B3 on request
conformity according to EN 60721-3-6	Yes; Class 6B2 mold, fungal and dry rot spores (excluding fauna)
resistance to chemically active substances	
conformity according 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 according to EN 60721-3-6	Yes
resistance to mechanically active substances	
conformity according 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 according 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 / according 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 / according 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 according to IPC-CC-830A	Yes; Conformal coating, class A
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 components / 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 mode	12
performance data / telecontrol	
suitability for use	
node station	No
substation	Yes
TIM control center	Yes
protocol / is supported	
SINAUT ST1 protocol	Yes
SINAUT ST7 protocol	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-	Yes

bit	
• for SINAUT ST7 protocol with multi-master polling / 10-bit • for SINAUT ST7 protocol with polling or spontaneous / 10-bit or 11-bit	Yes Yes
operating mode for scanning of data transmission	
• with dedicated line/radio link / with SINAUT ST1 protocol • with dedicated line/radio link / with SINAUT ST7 protocol • with dial-up network / with SINAUT ST1 protocol • with dial-up network / with SINAUT ST7 protocol	Polling, polling with time slot procedure Polling, polling with time slot procedure, multi-master polling with time slot procedure spontaneous spontaneous
hamming distance	
• for SINAUT ST1 protocol • for SINAUT ST7 protocol	4 4
product functions / management, configuration, engineering	
configuration software	
• required • for CPU configuring / required / SINAUT TD7 block library for CPU • for PG configuring / required / SINAUT ST7 configuration software for PG	SINAUT ST7 ES Yes 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
standards, specifications, approvals	
reference code	
• according to IEC 81346-2:2019	KEC
further information / internet links	
internet link	
• to web page: selection aid TIA Selection Tool • to website: Industrial communication • to web page: SiePortal • to website: Image database • to website: CAx-Download-Manager • to website: Industry Online Support	https://www.siemens.com/tstcloud https://www.siemens.com/simatic-net https://sieportal.siemens.com/ https://www.automation.siemens.com/bilddb https://www.siemens.com/cax https://support.industry.siemens.com
security information	
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Approvals / Certificates	
General Product Approval	EMV
Miscellaneous Manufacturer Declaration	  KC 

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