

product type designation



TIM 3V-IE

SINAUT ST7, TIM 3V-IE communications module for SIMATIC S7-300 with an RS232 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	0 ... 60 °C
• during storage	-40 ... +70 °C
• during transport	-40 ... +70 °C
relative humidity	
• at 25 °C / without condensation / during operation / maximum	95 %

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	0.25 kg
product features, product functions, product components / general	
number of units	
• per CPU / maximum	1
• note	Number of TIM per S7-300
wire length	
• with RS 232 interface / maximum	6 m
performance data / S7 communication	
number of possible connections / for S7 communication	
• maximum	8
• with PG connections / maximum	2
• 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	No
• note	RS232 and Industrial Ethernet can not be operated in parallel
protocol / is supported	
• DNP3	No
• SINAUT ST1 protocol	Yes
• SINAUT ST7 protocol	Yes
product function / data buffering if connection is aborted	Yes; 16,000 data messages
storage capacity	
• of S7 CPU work memory / for TD7onCPU mode data blocks on CPU / required	20 Kibyte
• of S7 CPU work memory / for TD7onTIM mode data blocks on TIM / required	0 Kibyte
• 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	Yes

library for CPU	
<ul style="list-style-type: none"> • for PG configuring / required / SINAUT ST7 configuration software for PG 	Yes
storage location / of TIM configuration data	on the TIM
product functions / security	
operating mode / Virtual Private Network (VPN)	Yes; VPN operation as MSC client with MSC protocol and password protection only possible in conjunction with GPRS modem with MSC capability
type of authentication / with Virtual Private Network / PSK product function	Yes
<ul style="list-style-type: none"> • password protection for VPN 	Yes
<ul style="list-style-type: none"> • MSC client via GPRS modem with MSC capability 	Yes
protocol	
<ul style="list-style-type: none"> • is supported / MSC protocol 	No
key length / for MSC / with Virtual Private Network	128 bit
number of possible connections	
<ul style="list-style-type: none"> • as MSC client / with VPN connection 	1
<ul style="list-style-type: none"> • as MSC server / with VPN connection 	0
standards, specifications, approvals / hazardous environments	
certificate of suitability / CCC / for hazardous zone according to GB standard	Yes
further information / internet-Links	
Internet-Link	
<ul style="list-style-type: none"> • to web page: selection aid TIA Selection Tool 	http://www.siemens.com/tia-selection-tool
<ul style="list-style-type: none"> • to website: Industrial communication 	http://www.siemens.com/simatic-net
<ul style="list-style-type: none"> • to website: Industry Mall 	https://mall.industry.siemens.com
<ul style="list-style-type: none"> • to website: Information and Download Center 	http://www.siemens.com/industry/infocenter
<ul style="list-style-type: none"> • to website: Image database 	http://automation.siemens.com/bilddb
<ul style="list-style-type: none"> • to website: CAx-Download-Manager 	http://www.siemens.com/cax
<ul style="list-style-type: none"> • 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)

last modified:

7/7/2022 