

product type designation



TIM 3V-IE Advanced

SINAUT ST7, TIM 3V-IE advanced 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 <ul style="list-style-type: none">note	Number of TIMs per S7-300: multiple, number depends on the connection resources of the S7-300 CPU
wire length <ul style="list-style-type: none">with RS 232 interface / maximum	
performance data / S7 communication	
number of possible connections / for S7 communication <ul style="list-style-type: none">maximumwith PG connections / maximumwith OP connections / maximum	24 4 20
service <ul style="list-style-type: none">SINAUT ST7 via S7 communicationPG/OP communication	Yes Yes
performance data / multi-protocol mode	
number of active connections / with multi-protocol mode	24
performance data / telecontrol	
suitability for use <ul style="list-style-type: none">node stationsubstationTIM control centernote	Yes Yes Yes RS232 and Industrial Ethernet can be operated in parallel
protocol / is supported <ul style="list-style-type: none">DNP3SINAUT ST1 protocolSINAUT ST7 protocol	No Yes Yes
product function / data buffering if connection is aborted	Yes; 32,000 data messages
storage capacity <ul style="list-style-type: none">of S7 CPU work memory / for TD7onCPU mode data blocks on CPU / requiredof S7 CPU work memory / for TD7onTIM mode data blocks on TIM / requirednote	20 Kibyte 0 Kibyte 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 <ul style="list-style-type: none">for SINAUT ST1 protocol with polling / 11 bitfor SINAUT ST1 protocol with spontaneous / 10-bit or 11-bitfor SINAUT ST7 protocol with multi-master polling / 10-bitfor SINAUT ST7 protocol with polling or spontaneous / 10-bit or 11-bit	Yes Yes Yes Yes
operating mode for scanning of data transmission <ul style="list-style-type: none">with dedicated line/radio link / with SINAUT ST1 protocolwith dedicated line/radio link / with SINAUT ST7 protocolwith dial-up network / with SINAUT ST1 protocolwith 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 <ul style="list-style-type: none">for SINAUT ST1 protocolfor SINAUT ST7 protocol	4 4
product functions / management, configuration, engineering	
configuration software <ul style="list-style-type: none">requiredfor CPU configuring / required / SINAUT TD7 block library for CPU	SINAUT ST7 ES Yes

<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
type of authentication / with Virtual Private Network / PSK	Yes
product function	
<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 	Yes
<ul style="list-style-type: none"> with Virtual Private Network MSC / is supported 	TCP/IP
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	
reference code	
<ul style="list-style-type: none"> according to IEC 81346-2:2019 	KEC
further information / internet links	
internet link	
<ul style="list-style-type: none"> to website: Selection guide for cables and connectors 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://support.industry.siemens.com/cs/ww/en/view/109766358 https://www.siemens.com/tstcloud https://www.siemens.com/simatic-net https://sieportal.siemens.com/ https://www.automation.siemens.com/bilddb https://siemens.com/cax https://support.industry.siemens.com
security information	
security information	<p>Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit www.siemens.com/cybersecurity-industry. Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under https://www.siemens.com/cert. (V4.7)</p>

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General Product Approval



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EMV

For use in hazardous locations

[KC](#)



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Environment

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