

product type designation



TIM 3V-IE

-- spare part -- 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).

Technical Product Detail Page

<https://l.siemens.com/1P6NH7800-3BA00>

transfer rate	
transfer rate	
<ul style="list-style-type: none"> for Industrial Ethernet 	10 ... 100 Mbit/s
<ul style="list-style-type: none"> according to RS 232 	50 ... 38400 bit/s
interfaces	
number of interfaces / according to Industrial Ethernet	1
number of electrical connections	
<ul style="list-style-type: none"> for external data transmission / according to RS 232 	1
<ul style="list-style-type: none"> for power supply 	1
type of electrical connection	
<ul style="list-style-type: none"> of Industrial Ethernet interface 	RJ45 port
type of electrical connection	
<ul style="list-style-type: none"> at interface 1 / for external data transmission 	9 pin Sub-D-connector (RS232)
<ul style="list-style-type: none"> for power supply 	2-pole plugable terminal block
design of the removable storage	
<ul style="list-style-type: none"> 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	
<ul style="list-style-type: none"> at 5 V 	5 %
relative positive tolerance / at DC / at 24 V	5 %
relative negative tolerance / at DC / at 24 V	5 %
consumed current	
<ul style="list-style-type: none"> from backplane bus / at DC / at 24 V / maximum 	0.2 A
<ul style="list-style-type: none"> 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	
<ul style="list-style-type: none"> during operation 	0 ... 60 °C
<ul style="list-style-type: none"> during storage 	-40 ... +70 °C
<ul style="list-style-type: none"> during transport 	-40 ... +70 °C
relative humidity	

<ul style="list-style-type: none"> 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"> per CPU / maximum note 	1 Number of TIM per S7-300
wire length <ul style="list-style-type: none"> with RS 232 interface / maximum 	6 m
performance data / S7 communication	
number of possible connections / for S7 communication <ul style="list-style-type: none"> maximum with PG connections / maximum with OP connections / maximum 	8 2 8
service <ul style="list-style-type: none"> SINAUT ST7 via S7 communication PG/OP communication 	Yes Yes
performance data / multi-protocol mode	
number of active connections / with multi-protocol mode	12
performance data / telecontrol	
suitability for use <ul style="list-style-type: none"> node station substation TIM control center note 	No Yes No RS232 and Industrial Ethernet can not be operated in parallel
protocol / is supported <ul style="list-style-type: none"> DNP3 SINAUT ST1 protocol SINAUT ST7 protocol 	No Yes Yes
product function / data buffering if connection is aborted	Yes; 16,000 data messages
storage capacity <ul style="list-style-type: none"> of S7 CPU work memory / for TD7onCPU mode data blocks on CPU / required of S7 CPU work memory / for TD7onTIM mode data blocks on TIM / required note 	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 bit for SINAUT ST1 protocol with spontaneous / 10-bit or 11-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 Yes Yes
operating mode for scanning of data transmission <ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> for SINAUT ST1 protocol for SINAUT ST7 protocol 	4 4
product functions / management, configuration, engineering	

configuration software	
<ul style="list-style-type: none"> • 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 TIM
product function / is supported / identification link	Yes; acc. to IEC 61406-1:2022
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	Yes
product function	
<ul style="list-style-type: none"> • password protection for VPN • MSC client via GPRS modem with MSC capability 	Yes 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 • as MSC server / with VPN connection 	1 0
standards, specifications, approvals	
certificate of suitability / CE marking	Yes
certificate of suitability / UKCA marking	Yes
certificate of suitability / KC approval	Yes
certificate of suitability / Regulatory Compliance Mark (RCM)	Yes
certificate of suitability / RoHS conformity	Yes
standards, specifications, approvals / hazardous environments / header	
certificate of suitability / ATEX	Yes
certificate of suitability / IECEx	Yes
certificate of suitability / ULhazloc approval	Yes
certificate of suitability / CCC / for hazardous zone according to GB standard	Yes
certificate of suitability / FM registration	Yes
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	
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For use in hazardous locations

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