



SINAUT ST7, TIM 3V-IE ADVANCED COMMUNICATION MODULE FOR SIMATIC S7-300 WITH A RS232-INTERFACE FOR SINAUT COMMUNICATION VIA A CLASSIC WAN AND A RJ45 INTERFACE FOR SINAUT COMMUNICATION VIA AN IP-BASED NETWORK (WAN OR LAN)

Transmission rate

Transfer rate

- | | |
|---|--|
| <ul style="list-style-type: none"> • for Industrial Ethernet • acc. to RS 232 | <p>10 ... 100 Mbit/s</p> <p>50 ... 38400 bit/s</p> |
|---|--|

Interfaces

Number of interfaces / acc. to Industrial Ethernet	1
Number of electrical connections	
<ul style="list-style-type: none"> • for external data transmission / acc. to RS 232 • for power supply 	<p>1</p> <p>1</p>
Type of electrical connection	
<ul style="list-style-type: none"> • of Industrial Ethernet interface • at interface 1 / for external data transmission • for power supply 	<p>RJ45 port</p> <p>9 pin Sub-D-connector (RS232)</p> <p>2-pole plugable terminal block</p>
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
Relative symmetrical tolerance / for DC	
<ul style="list-style-type: none"> • at 5 V 	5 %
Relative positive tolerance / for DC / at 24 V	5 %
Relative negative tolerance / for DC / at 24 V	5 %
Consumed current	

<ul style="list-style-type: none"> • from backplane bus / for DC / at 24 V / maximum 	0.2 A
<ul style="list-style-type: none"> • from external supply voltage / for DC / at 24 V / maximum 	0.2 A
Active power loss	5.8 W
Product expansion / optional / Backup battery	No

Permitted 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 / at 25 °C / without condensation / during operation / maximum	95 %
Protection class IP	IP20

Design, dimensions and weight

Module format	Compact module S7-300 single width
Width	40 mm
Height	125 mm
Depth	120 mm
Net weight	0.25 kg

Product properties, functions, 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
Cable 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 	24
<ul style="list-style-type: none"> • with PG connections / maximum 	4
<ul style="list-style-type: none"> • with OP connections / maximum 	20
Service	
<ul style="list-style-type: none"> • SINAUT ST7 via S7 communication 	Yes
<ul style="list-style-type: none"> • PG/OP communication 	Yes

Performance data / multi-protocol mode

Number of active connections / with multi-protocol mode	24
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Performance data / telecontrol

Suitability for use	
<ul style="list-style-type: none"> • Node station 	Yes

<ul style="list-style-type: none"> • substation • TIM control center • Note 	<p>Yes</p> <p>Yes</p> <p>RS232 and Industrial Ethernet can be operated in parallel</p>
<p>Protocol / is supported</p> <ul style="list-style-type: none"> • TCP/IP • DNP3 • SINAUT ST1 protocol • SINAUT ST7 protocol 	<p>Yes</p> <p>No</p> <p>Yes</p> <p>Yes</p>
<p>Product function / data buffering if connection is aborted</p> <ul style="list-style-type: none"> • Note 	<p>Yes</p> <p>32,000 data messages</p>
<p>Storage capacity</p> <ul style="list-style-type: none"> • of S7 CPU RAM / for TD7onCPU mode data blocks on CPU / required • of S7 CPU RAM / for TD7onTIM mode data blocks on TIM / required • Note 	<p>20 Kibyte</p> <p>0 Kibyte</p> <p>TD7onCPU: at least 20 KB, actual requirement determined by data volume and functional scope TD7onTIM: 0 bytes in most favorable case</p>
<p>Product property / Buffered message frame memory</p>	<p>No</p>
<p>Transmission format</p> <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 	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>
<p>Operating mode for scanning of data transmission</p> <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 	<p>Polling, polling with time slot procedure</p> <p>Polling, polling with time slot procedure, multi-master polling with time slot procedure</p> <p>spontaneous</p> <p>spontaneous</p>
<p>Hamming distance</p> <ul style="list-style-type: none"> • for SINAUT ST1 protocol • for SINAUT ST7 protocol 	<p>4</p> <p>4</p>
<p>Product functions / management, configuration</p>	
<p>Configuration software</p> <ul style="list-style-type: none"> • required 	<p>SINAUT ST7 ES</p>

<ul style="list-style-type: none"> • for CPU configuring / required / SINAUT TD7 block library for CPU 	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

Suitability for operation / Virtual Private Network	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

Further Information / Internet Links

Internet-Link	
<ul style="list-style-type: none"> • to website: Selector SIMATIC NET SELECTION TOOL 	http://www.siemens.com/snst
<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/automation/net/catalog
<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

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