

Product type designation

**TIM 3V-IE**

SINAUT ST7, TIM 3V-IE 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"> <li>for Industrial Ethernet</li> </ul>	10 ... 100 Mbit/s
<ul style="list-style-type: none"> <li>acc. to RS 232</li> </ul>	50 ... 38400 bit/s

**Interfaces**

Number of interfaces / acc. to Industrial Ethernet	1
Number of electrical connections	
<ul style="list-style-type: none"> <li>for external data transmission / acc. to RS 232</li> </ul>	1
<ul style="list-style-type: none"> <li>for power supply</li> </ul>	1
Type of electrical connection	
<ul style="list-style-type: none"> <li>of Industrial Ethernet interface</li> </ul>	RJ45 port
<ul style="list-style-type: none"> <li>at interface 1 / for external data transmission</li> </ul>	9 pin Sub-D-connector (RS232)
<ul style="list-style-type: none"> <li>for power supply</li> </ul>	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

### Permitted 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 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	
• 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	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	
<ul style="list-style-type: none"> <li>• Node station</li> </ul>	No
<ul style="list-style-type: none"> <li>• substation</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• TIM control center</li> </ul>	No
<ul style="list-style-type: none"> <li>• Note</li> </ul>	RS232 and Industrial Ethernet can not be operated in parallel
Protocol / is supported	
<ul style="list-style-type: none"> <li>• TCP/IP</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• DNP3</li> </ul>	No
<ul style="list-style-type: none"> <li>• SINAUT ST1 protocol</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• SINAUT ST7 protocol</li> </ul>	Yes
Product function / data buffering if connection is aborted	Yes; 16,000 data messages
Storage capacity	
<ul style="list-style-type: none"> <li>• of S7 CPU RAM / for TD7onCPU mode data blocks on CPU / required</li> </ul>	20 Kibyte
<ul style="list-style-type: none"> <li>• of S7 CPU RAM / for TD7onTIM mode data blocks on TIM / required</li> </ul>	0 Kibyte
<ul style="list-style-type: none"> <li>• Note</li> </ul>	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"> <li>• for SINAUT ST1 protocol with polling / 11 bit</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• for SINAUT ST1 protocol with spontaneous / 10-bit or 11-bit</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• for SINAUT ST7 protocol with multi-master polling / 10-bit</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• for SINAUT ST7 protocol with polling or spontaneous / 10-bit or 11-bit</li> </ul>	Yes
Operating mode for scanning of data transmission	
<ul style="list-style-type: none"> <li>• with dedicated line/radio link / with SINAUT ST1 protocol</li> </ul>	Polling, polling with time slot procedure
<ul style="list-style-type: none"> <li>• with dedicated line/radio link / with SINAUT ST7 protocol</li> </ul>	Polling, polling with time slot procedure, multi-master polling with time slot procedure
<ul style="list-style-type: none"> <li>• with dial-up network / with SINAUT ST1 protocol</li> </ul>	spontaneous
<ul style="list-style-type: none"> <li>• with dial-up network / with SINAUT ST7 protocol</li> </ul>	spontaneous
Hamming distance	

<ul style="list-style-type: none"> <li>• for SINAUT ST1 protocol</li> </ul>	4
<ul style="list-style-type: none"> <li>• for SINAUT ST7 protocol</li> </ul>	4
<b>Configuration software</b> <ul style="list-style-type: none"> <li>• required</li> <li>• for CPU configuring / required / SINAUT TD7 block library for CPU</li> <li>• for PG configuring / required / SINAUT ST7 configuration software for PG</li> </ul>	SINAUT ST7 ES Yes Yes
Storage location / of TIM configuration data	on the TIM

### Product functions / Security

Suitability for operation / Virtual Private Network	Yes
Operating mode Virtual Private Network / note	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
<b>Product function</b> <ul style="list-style-type: none"> <li>• password protection for VPN</li> <li>• MSC client via GPRS modem with MSC capability</li> </ul>	Yes Yes
<b>Protocol</b> <ul style="list-style-type: none"> <li>• is supported / MSC protocol</li> </ul>	No
Key length / for MSC / with Virtual Private Network	128 bit
<b>Number of possible connections</b> <ul style="list-style-type: none"> <li>• as MSC client / with VPN connection</li> <li>• as MSC server / with VPN connection</li> </ul>	1 0

### Accessories

### Further Information / Internet Links

<b>Internet-Link</b> <ul style="list-style-type: none"> <li>• to website: Selector SIMATIC NET SELECTION TOOL</li> <li>• to website: Industrial communication</li> <li>• to website: Industry Mall</li> <li>• to website: Information and Download Center</li> <li>• to website: Image database</li> <li>• to website: CAx Download Manager</li> <li>• to website: Industry Online Support</li> </ul>	<a href="http://www.siemens.com/snst">http://www.siemens.com/snst</a>  <a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a> <a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a> <a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a> <a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a> <a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a> <a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>
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### Security information

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Security information

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