

### Product type designation

### SIPLUS SINAUT ST7, TIM 3V-IE

SIPLUS ST7 TIM 3V-IE -25...+70 °C with conformal coating based on 6NH7800-3BA00 . communication module for "SIMATIC S7-300 and C7;" with one RS232 interface for SINAUT communication via classic WAN and an RJ45 interface for SINAUT communication via an IP-based network (WAN or LAN)



### Transmission rate

#### Transfer rate

- |                           |                    |
|---------------------------|--------------------|
| • for Industrial Ethernet | 10 ... 100 Mbit/s  |
| • acc. to RS 232          | 50 ... 38400 bit/s |

### Interfaces

Number of interfaces / acc. to Industrial Ethernet	1
Number of electrical connections	
• for external data transmission / acc. to RS 232	1
• for power supply	1
Type of electrical connection	
• of Industrial Ethernet interface	RJ45 port
• 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

### Permitted ambient conditions

Ambient temperature	
• during operation	-25 ... +70 °C
• during storage	-40 ... +70 °C
• during transport	-40 ... +70 °C
Ambient condition / relating to ambient temperature - air pressure - installation altitude	-25 ... +70°C at 1080 hPa ... 795 hPa (-1000 m ... +2000 m) // -25 ... +60°C at 795 hPa ... 658 hPa (+2000 m ... +3500 m) // -25 ... +50°C at 658 hPa ... 540 hPa (+3500 m ... +5000 m)
Relative humidity / with condensation / maximum	100 %; r.F., incl. condensation/frost permitted (no commissioning in bedewed state)
Resistance to biologically active substances	
• conformity acc. to EN 60721-3-3	Yes; Compliance with EN 60721-3-3, Class 3B2 mold, fungus, and sponge spores (except fauna). The supplied plug covers must remain in place over the unused interfaces during operation!
Resistance to chemically active substances	
• conformity acc. to EN 60721-3-3	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3). The supplied plug covers must remain in place over the unused interfaces during operation!
Resistance to mechanically active substances	
• conformity acc. to EN 60721-3-3	Yes; Class 3S4 incl. sand, dust. The supplied plug covers must remain in place over the unused interfaces during operation!
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	0.2 kg

### Product properties, functions, components / general

Number of units	
<ul style="list-style-type: none"> <li>per CPU / maximum</li> </ul>	1
Wire length	
<ul style="list-style-type: none"> <li>with RS 232 interface / maximum</li> </ul>	6 m
<b>Performance data / S7 communication</b>	
Number of possible connections / for S7 communication	
<ul style="list-style-type: none"> <li>maximum</li> </ul>	12
<ul style="list-style-type: none"> <li>with PG connections / maximum</li> </ul>	4
<ul style="list-style-type: none"> <li>with OP connections / maximum</li> </ul>	8
Service	
<ul style="list-style-type: none"> <li>SINAUT ST7 via S7 communication</li> </ul>	Yes
<ul style="list-style-type: none"> <li>PG/OP communication</li> </ul>	Yes
<b>Performance data / multi-protocol mode</b>	
Number of active connections / with multi-protocol mode	12
<b>Performance data / telecontrol</b>	
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>	Yes
Protocol / is supported	
<ul style="list-style-type: none"> <li>TCP/IP</li> </ul>	Yes
<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
Storage capacity	
<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> <li>• with dial-up network / with SINAUT ST1 protocol</li> <li>• with dial-up network / with SINAUT ST7 protocol</li> </ul>	Polling, polling with time slot procedure, multi-master polling with time slot procedure spontaneous spontaneous
Hamming distance <ul style="list-style-type: none"> <li>• for SINAUT ST1 protocol</li> <li>• for SINAUT ST7 protocol</li> </ul>	4 4
Configuration software <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 CPU

<b>Product functions / Security</b>	
Suitability for operation / Virtual Private Network	Yes
Type of authentication / with Virtual Private Network / PSK	Yes

**Accessories**

**Further Information / Internet Links**

Internet-Link <ul style="list-style-type: none"> <li>• to website: Selector SIMATIC NET SELECTION TOOL</li> <li>• to website: Industrial communication</li> <li>• to website: Information and Download Center</li> <li>• to website: Image database</li> <li>• to website: CAx Download Manager</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="http://www.siemens.com/automation/net/catalog">http://www.siemens.com/automation/net/catalog</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>
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