SIEMENS

6GK7543-1MX00-0XE0

TIM 1531 IRC Communication module for SIMATIC S7-1500, S7-400, S7-300 with SINAUT ST7 with three RJ45-interfaces for communication via IP-based networks (WAN / LAN) and one RS232/RS485 interface for communication via classic WAN networks

Transmission rate	
Transfer rate	
• at the 1st interface	10 ... 1000 Mbit/s
• at the 2nd interface	10 ... 100 Mbit/s
• at interface 3	10 ... 100 Mbit/s
• acc. to RS 232	300 ... 115200 bit/s

Interfaces	
Number of interfaces / acc. to Industrial Ethernet	3
Number of electrical connections	
• for external data transmission / acc. to RS 232	1
• for power supply	1
Number of slots	
• for memory cards	1
Type of electrical connection	
• of Industrial Ethernet interface	RJ45 port
• at interface 1 / for external data transmission	9 pin Sub-D-connector, RS232 switchable to RS485
• for power supply	2-pole plugable terminal block
Slot version	

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• of the memory card	SD 1.0, SD 1.1, SDHC, Siemens SMC
Storage capacity / of the memory card / maximum	32 Gibyte

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
Consumed current	
• from external supply voltage / at DC / at 24 V / typical	0.15 A
• from external supply voltage / at DC / at 24 V / maximum	0.3 A
Power loss [W] / with external supply voltage / at 24 V DC	
• in update mode / typical	3.9 W
• in communication mode / typical	3.9 W
Product extension / optional / Backup battery	No

Permitted ambient conditions

Ambient temperature	
• during operation	0 ... 70 °C
• for vertical installation / during operation	0 ... 50 °C
• for horizontally arranged busbars / during operation	0 ... 70 °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

Width	70 mm
Height	147 mm
Depth	129 mm
Net weight	0.525 kg
Mounting type	
• 35 mm DIN rail mounting	No
• S7-300 rail mounting	No
• S7-1500 rail mounting	Yes

Product properties, functions, components / general

Product function	
• DynDNS client	No
Wire length	

• with RS 232 interface / maximum	6 m
• with RS 485 interface / maximum	30 m

Performance data / S7 communication

Number of possible connections / for S7 communication	
• maximum	62
• with PG connections / maximum	2
• with OP connections / maximum	1
• Note	only via LAN
Service	
• of SIMATIC communication / as server	Yes
• SINAUT ST7 via S7 communication	Yes
• PG/OP communication	Yes

Performance data / IT functions

Number of possible connections	
• as e-mail client / maximum	1

Performance data / telecontrol

Suitability for use	
• Node station	Yes
• substation	Yes
• TIM control center	Yes
Protocol / is supported	
• TCP/IP	Yes
• DNP3	No
• IEC 60870-5	No
• SINAUT ST1 protocol	No
• SINAUT ST7 protocol	Yes
• Modbus RTU	No
Product function / data buffering if connection is aborted	Yes
Number of data points per station / maximum	1000
Product feature / Buffered message frame memory	Yes
Transmission format	
• for SINAUT ST7 protocol with polling or spontaneous / 10-bit or 11-bit	Yes
Operating mode for scanning of data transmission	
• with dial-up network / with SINAUT ST7 protocol	spontaneous
Hamming distance	
• for SINAUT ST7 protocol	4

Performance data / Teleservice

Diagnostics function / online diagnostics with SIMATIC STEP 7	Yes
Product function	
• program download with SIMATIC STEP 7	Yes
• Remote firmware update	Yes
• remote configuration	No
Product function / MIB support	Yes
Protocol / is supported	
• SNMP v1	Yes
• SNMP v3	Yes
• DCP	Yes
• LLDP	No
Configuration software	
• for CPU configuring / required / SINAUT TD7 block library for CPU	No
• for PG configuring / required / SINAUT ST7 configuration software for PG	No
Identification & maintenance function	
• I&M0 - device-specific information	Yes
• I&M1 – higher-level designation/location designation	Yes
• I&M2 - installation date	Yes
• I&M3 - comment	Yes

Product functions / Diagnosis

Product function / Web-based diagnostics	Yes

Product functions / Security

Product function	
• MSC client via GPRS modem with MSC capability	Yes
Protocol	
• is supported / MSC protocol	Yes
• with Virtual Private Network MSC / is supported	TCP/IP
Key length / for MSC / with Virtual Private Network	128 bit
Number of possible connections	
• as MSC client / with VPN connection	1
• as MSC server / with VPN connection	127

Product functions / Time

Product function / SICLOCK support	No
Product function / pass on time synchronization	Yes
Protocol / is supported	
• NTP	Yes
• NTP (secure)	Yes

Product component / Hardware real-time clock	No
Product feature / Hardware real-time clock w. battery backup	No
time synchronization	
• from NTP-server	Yes
• from GPS-signal	No
• from control center	Yes
• from mobile network provider	No
• PC	No
• manual setting	No

Product functions / Position recognition

Product function	
• position detection with GPS	No
• pass on position data	No

Accessories

Further Information / Internet Links

Internet-Link	
• to website: Selector SIMATIC NET SELECTION TOOL	http://www.siemens.com/snst
• to website: Industrial communication	http://www.siemens.com/simatic-net
• to website: Information and Download Center	http://www.siemens.com/industry/infocenter
• to website: Image database	http://automation.siemens.com/bilddb
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