

product type designation

SIPLUS TIM 1531 IRC

SIPLUS TIM 1531 IRC -40...+70°C with conformal coating based on 6GK7543-1MX00-0XE0 . communication module for SIMATIC S7-1500, S7-400, S7-300 with SINAUT ST7 with three RJ145 interfaces for communication via IP-based networks (WAN / LAN) and a RS-232/RS-485- Interface for Communications via classic WAN networks



Figure similar

transfer rate	
transfer rate	
<ul style="list-style-type: none"> • at the 1st interface 	10 ... 1000 Mbit/s
<ul style="list-style-type: none"> • at the 2nd interface 	10 ... 100 Mbit/s
<ul style="list-style-type: none"> • at interface 3 	10 ... 100 Mbit/s
<ul style="list-style-type: none"> • acc. to RS 232 	300 ... 115200 bit/s
interfaces	
number of interfaces / acc. to Industrial Ethernet	3
number of electrical connections	
<ul style="list-style-type: none"> • for external data transmission / acc. to RS 232 	1
<ul style="list-style-type: none"> • for power supply 	1
number of slots	
<ul style="list-style-type: none"> • for memory cards 	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 • for power supply 	9 pin Sub-D-connector, RS232 switchable to RS485 2-pole plugable terminal block
slot version	
<ul style="list-style-type: none"> • of the memory card 	SD 1.0, SD 1.1, SDHC, Siemens SMC
storage capacity / of the memory card / maximum	32 Gbyte

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	
<ul style="list-style-type: none"> • from external supply voltage / at DC / at 24 V / typical 	0.15 A
<ul style="list-style-type: none"> • from external supply voltage / at DC / at 24 V / maximum 	0.3 A
power loss [W] / with external supply voltage / at 24 V DC	
<ul style="list-style-type: none"> • in update mode / typical 	3.9 W
<ul style="list-style-type: none"> • in communication mode / typical 	3.9 W
product extension / optional / backup battery	No

ambient conditions

ambient temperature	
<ul style="list-style-type: none"> • for vertical installation / during operation 	-40 ... +50 °C
<ul style="list-style-type: none"> • for horizontally arranged busbars / during operation 	-40 ... +70 °C
<ul style="list-style-type: none"> • during storage 	-40 ... +70 °C
<ul style="list-style-type: none"> • during transport 	-40 ... +70 °C
installation altitude / at height above sea level / maximum	5000 m
ambient condition / relating to ambient temperature - air pressure - installation altitude	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... (Tmax - 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax - 20 K) at 658 hPa ... 540 hPa (+3 500 m ... +5 000 m)
relative humidity	
<ul style="list-style-type: none"> • with condensation / acc. to IEC 60068-2-38 / maximum 	100 %; RH including condensation/frost (no commissioning when condensation is present), horizontal installation
chemical resistance / to commercially available cooling lubricants	Yes; incl. airborne diesel and oil droplets
resistance to biologically active substances	
<ul style="list-style-type: none"> • conformity acc. to EN 60721-3-3 	Yes; Class 3B2 mold and fungal spores (excluding fauna), Class 3B3 on request
<ul style="list-style-type: none"> • conformity acc. to EN 60721-3-6 	Yes; Class 6B2 mold, fungal and dry rot spores (excluding fauna)

resistance to chemically active substances <ul style="list-style-type: none"> • conformity acc. to EN 60721-3-3 • conformity acc. to EN 60721-3-6 	Yes; Class 3C4 (RH < 75 %) incl. salt spray in accordance with EN 60068-2-52 (Severity 3). The supplied plug covers must remain in place on the unused interfaces during operation. Yes
resistance to mechanically active substances <ul style="list-style-type: none"> • conformity acc. to EN 60721-3-3 • conformity acc. to EN 60721-3-6 	Yes; Class 3S4 incl. sand, dust. The supplied plug covers must remain in place over the unused interfaces during operation. Yes; Class 6S3 incl. sand, dust. The supplied plug covers must remain in place over the unused interfaces during operation.
coating / for equipped printed circuit board / acc. to EN 61086	Yes; Class 2 for high availability
type of coating / protection against pollution according to EN 60664-3	Yes; Protection of the type 1
type of test / of the coating / acc. to MIL-I-46058C	Yes; Coating discoloration during service life possible
product conformity / of the coating / Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies acc. to IPC-CC-830A	Yes; Conformal coating, class A
protection class IP	IP20

design, dimensions and weights

module format	Compact module S7-1500 double-wide
width	70 mm
height	147 mm
depth	129 mm
net weight	0.525 kg
mounting type <ul style="list-style-type: none"> • 35 mm DIN rail mounting • S7-300 rail mounting • S7-1500 rail mounting 	No No Yes

product features, product functions, product components / general

product function <ul style="list-style-type: none"> • DynDNS client 	No
number of units <ul style="list-style-type: none"> • note 	Number of TIM per S7-1500: 1
wire length <ul style="list-style-type: none"> • with RS 232 interface / maximum • with RS 485 interface / maximum 	6 m 30 m

performance data / S7 communication

number of possible connections / for S7 communication <ul style="list-style-type: none"> • maximum • with PG connections / maximum • with PG/OP connections / maximum 	132; only via LAN 4 4
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<ul style="list-style-type: none"> • with OP connections / maximum 	4
service	
<ul style="list-style-type: none"> • of SIMATIC communication / as server 	Yes
<ul style="list-style-type: none"> • SINAUT ST7 via S7 communication 	Yes
<ul style="list-style-type: none"> • PG/OP communication 	Yes

performance data / IT functions

number of possible connections	
<ul style="list-style-type: none"> • as server / by means of HTTP / maximum 	2
<ul style="list-style-type: none"> • as server / by means of HTTPS / maximum 	2; 2 per Ethernet interface
<ul style="list-style-type: none"> • as e-mail client / maximum 	1

performance data / telecontrol

suitability for use	
<ul style="list-style-type: none"> • node station 	Yes
<ul style="list-style-type: none"> • substation 	Yes
<ul style="list-style-type: none"> • TIM control center 	Yes
control center connection	Systems with ST7, DNP3 and IEC 60870-5-101/104 protocol
<ul style="list-style-type: none"> • by means of a permanent connection 	Systems with ST7, DNP3 and IEC 60870-5-101/104 protocol
protocol / is supported	
<ul style="list-style-type: none"> • DNP3 	Yes
<ul style="list-style-type: none"> • IEC 60870-5 	Yes
<ul style="list-style-type: none"> • SINAUT ST1 protocol 	No
<ul style="list-style-type: none"> • SINAUT ST7 protocol 	Yes
<ul style="list-style-type: none"> • Modbus RTU 	No
product function / data buffering if connection is aborted	Yes; 100000 data telegrams (ST7) or 250000 events (IEC 60870-5 / DNP3)
number of data points per station / maximum	3000
number of DNP3 masters	
<ul style="list-style-type: none"> • for Ethernet / maximum 	4
<ul style="list-style-type: none"> • with RS 232 interface / maximum 	4
product feature / buffered message frame memory	Yes
transmission format	
<ul style="list-style-type: none"> • for SINAUT ST7 protocol with polling or spontaneous / 10-bit or 11-bit 	Yes
operating mode for scanning of data transmission	
<ul style="list-style-type: none"> • with dedicated line/radio link / with SINAUT ST7 protocol 	Polling, polling with time slot procedure
<ul style="list-style-type: none"> • with dial-up network / with SINAUT ST7 protocol 	spontaneous
hamming distance	
<ul style="list-style-type: none"> • for SINAUT ST7 protocol 	4

performance data / teleservice

diagnostics function / online diagnostics with SIMATIC STEP 7	Yes
product function	
<ul style="list-style-type: none"> • program download with SIMATIC STEP 7 	Yes
<ul style="list-style-type: none"> • remote firmware update 	Yes
<ul style="list-style-type: none"> • remote configuration 	Yes

product functions / management, configuration, engineering

product function / MIB support	Yes
protocol / is supported	
<ul style="list-style-type: none"> • SNMP v1 	Yes
<ul style="list-style-type: none"> • SNMP v3 	Yes
<ul style="list-style-type: none"> • DCP 	Yes
<ul style="list-style-type: none"> • LLDP 	Yes
configuration software	
<ul style="list-style-type: none"> • required 	STEP 7 Professional V14 SP1 (TIA Portal) or higher
<ul style="list-style-type: none"> • for CPU configuring / required / SINAUT TD7 block library for CPU 	No
<ul style="list-style-type: none"> • for PG configuring / required / SINAUT ST7 configuration software for PG 	No
storage location / of TIM configuration data	Flash or SD card of the TIM 1531 IRC
identification & maintenance function	
<ul style="list-style-type: none"> • I&M0 - device-specific information 	Yes
<ul style="list-style-type: none"> • I&M1 – higher-level designation/location designation 	Yes
<ul style="list-style-type: none"> • I&M2 - installation date 	Yes
<ul style="list-style-type: none"> • I&M3 - comment 	Yes

product functions / diagnostics

product function / web-based diagnostics	Yes
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product functions / routing

service / routing / note	IP routing up to 1 Mbps
product function	
<ul style="list-style-type: none"> • static IP routing 	Yes
<ul style="list-style-type: none"> • static IP routing IPv6 	Yes
<ul style="list-style-type: none"> • dynamic IP routing 	No
<ul style="list-style-type: none"> • dynamic IP routing IPv6 	No
protocol / is supported	
<ul style="list-style-type: none"> • RIP v1 	No
<ul style="list-style-type: none"> • RIPv2 	No
<ul style="list-style-type: none"> • RIPnG for IPv6 	No
<ul style="list-style-type: none"> • OSPFv2 	No
<ul style="list-style-type: none"> • OSPFv3 for IPv6 	No

• VRRP	No
• VRRP for IPv6	No
• BGP	No
• PPP	No
• PPoE via DSL	No

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 detection

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

further information / internet-Links

Internet-Link	
• to website: Selector TIA Selection Tool	http://www.siemens.com/snst
• to website: Industrial communication	http://www.siemens.com/simatic-net
• to website: Industry Mall	https://mall.industry.siemens.com

- to website: Information and Download Center
- to website: Image database
- to website: CAx Download Manager
- to website: Industry Online Support

<http://www.siemens.com/industry/infocenter>

<http://automation.siemens.com/bilddb>

<http://www.siemens.com/cax>

<https://support.industry.siemens.com>

security information

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last modified:

10/12/2020