

Product type designation

RTU3030C

SIMATIC RTU3030C compact low-power RTU; Battery or solar-operated; connection ext. power supply 10.8 V to 28.8 V DC; integrated UMTS modem; Connection to Telecontrol Server Basic DNP3, IEC 60870-5-104 and SINAUT ST7 protocol; onboard I/Os: 8 DI, 4 DQ, 4 AI; FTP client; Ethernet port, configuration / diagnostics via web server, time-of-day synchronization, text message, email, SD card slot, observe national approvals!

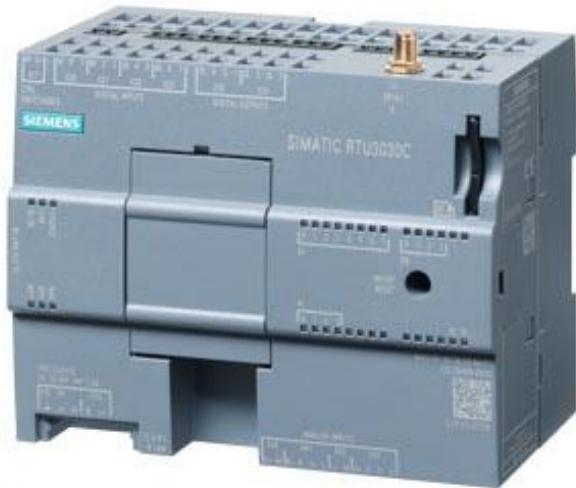


Figure similar

Operating mode

Standby mode (Sleep mode), Actualization mode, Communication mode

Transfer rate

Transfer rate

- | | |
|---------------------------|-------------------|
| • for Industrial Ethernet | 10 ... 100 Mbit/s |
| • for GPRS transmission | |
| — with downlink / maximum | 85.6 kbit/s |
| — with uplink / maximum | 107 kbit/s |
| • with UMTS transmission | |
| — with downlink / maximum | 21 Mbit/s |
| — with uplink / maximum | 5.76 Mbit/s |

Interfaces

Number of interfaces / acc. to Industrial Ethernet

1

Number of electrical connections

- | | |
|--|---|
| • at the 1st interface / acc. to Industrial Ethernet | 1 |
| • for external antenna(s) | 1 |

<ul style="list-style-type: none"> • for power supply 	1
Number of slots	
<ul style="list-style-type: none"> • for SIM cards 	1
<ul style="list-style-type: none"> • for memory cards 	1
Type of electrical connection	
<ul style="list-style-type: none"> • at the 1st interface / acc. to Industrial Ethernet 	RJ45 port
Type of electrical connection	
<ul style="list-style-type: none"> • for external antenna(s) 	SMA socket (50 ohms)
<ul style="list-style-type: none"> • for power supply 	5-pole plugable terminal block
Slot version	
<ul style="list-style-type: none"> • for SIM card 	Mini SIM card, with adapter Micro SIM card also
<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
design of the removable storage / C-PLUG	No

Signal inputs/outputs

Number of electrical connections / for digital input signals	8
Type of electrical connection / for digital input signals	pluggable screw terminal block
Digital input version	Suitable for open-drain transistor or switch, 2-wire-technique
Number of electrical connections / as counter inputs / for digital input signals	2
Pulse duration / at counter input / minimum	0.1 ms
Pulse frequency / at counter input / maximum	5000 Hz
Number of electrical connections / for digital output signals	4
Type of electrical connection / for digital output signals	pluggable screw terminal block
Digital output version	bistable relay, 2-wire-technique
Output current / at digital output	300 mA; Limiting continuous current
Number of analog inputs / Integrated	4
Connector type / at the analog input	pluggable screw terminal block
Type of analog input	2-/3-/4-wire-technique
Product function / parameterizable analog inputs	Yes; Current 0/4..20mA, Voltage 0..5/10V, Temperature (Pt1000) -80..+140°C
A/D resolution / at the analog input	12 bit

Wireless technology

Type of mobile wireless service	
<ul style="list-style-type: none"> • is supported / SMS 	Yes
<ul style="list-style-type: none"> • is supported / GPRS 	Yes
<ul style="list-style-type: none"> • Note 	GPRS (Multislot Class 10)
Type of mobile network / is supported	
<ul style="list-style-type: none"> • GSM 	Yes
<ul style="list-style-type: none"> • UMTS 	Yes

• LTE	No
Operating frequency / for GSM transmission	850 MHz, 900 MHz, 1800 MHz, 1900 MHz
Operating frequency / with UMTS transmission	900 MHz, 2100 MHz

Supply voltage, current consumption, power loss

Type of voltage / of the supply voltage	DC
Supply voltage / external / at DC	12 ... 24 V
Supply voltage / external / at DC / rated value	10.8 ... 28.8 V
Type of output voltage / for the supply of external devices	DC 12 V or 24 V
Consumed current / Note	without connected consumers
Consumed current	
<ul style="list-style-type: none"> • from external supply voltage / at 24 V DC <ul style="list-style-type: none"> — in standby mode / typical — in update mode / typical — in communication mode / typical • with battery operation / at 7.2 V DC <ul style="list-style-type: none"> — in standby mode / typical — in update mode / typical — in communication mode / typical 	14 mA 35 mA 83 mA 0.28 mA 71 mA 208 mA
Power loss [W]	without connected consumers
Power loss [W] / with external supply voltage / at 24 V DC	
<ul style="list-style-type: none"> • in standby mode / typical • in update mode / typical • in communication mode / typical 	0.34 W 0.85 W 2 W
Power loss [W] / with battery operation / at 7.2 V DC	
<ul style="list-style-type: none"> • in standby mode / typical • in update mode / typical • in communication mode / typical 	0.002 W 0.51 W 1.5 W

Ambient conditions

Ambient temperature	
<ul style="list-style-type: none"> • for vertical installation / during operation • for horizontally arranged busbars / during operation • during storage • during transport 	-40 ... +60 °C -40 ... +70 °C -40 ... +70 °C -40 ... +70 °C
Relative humidity	
<ul style="list-style-type: none"> • at 30 °C / without condensation / during operation / maximum 	95 %
Protection class IP	IP20; IP68 with protective housing (see accessories)

Design, dimensions and weights

Module format	Compact module
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Width	130 mm
Height	100 mm
Depth	75 mm
Net weight	0.37 kg
Mounting type	
• 35 mm DIN rail mounting	Yes
• wall mounting	Yes

Product features, product functions, product components / general

Product function	
• DynDNS client	Yes
• no-ip.com client	Yes

Performance data

Number of users/telephone numbers/email addresses / definable / maximum	20
Number of user groups / definable / maximum	10
Number of program block types	43
Number of configurable program blocks	48
Number of digital bit memories / maximum	40
Number of analog bit memories / maximum	24

Performance data / IT functions

Number of possible connections	
• as client / by means of FTP / maximum	1
Number of entries / in the FTP buffer / maximum	12
Number of possible connections	
• as server / by means of HTTP / maximum	2
• as server / by means of HTTPS / maximum	2; http and https can be combined (max. number of 2 connections cannot be exceeded). Max. one connection via https is possible on the mobile wireless interface.
• as e-mail client / maximum	1
Number of free texts / for e-mails and SMS / maximum	20
Number of characters / per free text for emails or SMS / maximum	160
Number of entries / in the e-mail buffer / maximum	12

Performance data / telecontrol

Suitability for use	
• Node station	No
• substation	Yes
• TIM control center	No
Control center connection	IEC 60870-5-104, DNP3-capable control stations, SINAUT ST7cc/sc, TeleControl Server Basic
• by means of a permanent connection	supported

<ul style="list-style-type: none"> • by means of demand-oriented connection 	supported
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 ST7 protocol 	Yes
Product function / data buffering if connection is aborted	Yes
Amount of data / as user data per station / in telecontrol mode / maximum	256 Kibyte
Product feature / Buffered message frame memory	Yes

Performance data / teleservice

Diagnostics function / online diagnostics with SIMATIC STEP 7	No
Product function	
<ul style="list-style-type: none"> • program download with SIMATIC STEP 7 	No
<ul style="list-style-type: none"> • Remote firmware update 	Yes
<ul style="list-style-type: none"> • remote configuration 	Yes

Product functions / management, configuration, engineering

Configuration software	
<ul style="list-style-type: none"> • required 	No, configuration by using the integrated webserver
Product function / gateway / for SIMATIC PDM	
<ul style="list-style-type: none"> • with Modbus TCP 	Yes
<ul style="list-style-type: none"> • with HART IP protocol 	Yes

Product functions / Diagnostics

Product function / Web-based diagnostics	Yes
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Product functions / Security

Operating mode / Virtual Private Network (VPN)	Yes
Product function / with VPN connection	OpenVPN
Type of authentication procedure / with VPN connection	certificate based
Type of authentication / with Virtual Private Network / PSK	No
Type of hashing algorithms / with VPN connection	SHA-256
Number of possible connections / with VPN connection	2; one simultaneous productive connection only
Product function	
<ul style="list-style-type: none"> • password protection for Web applications 	Yes
<ul style="list-style-type: none"> • password protection for teleservice access 	Yes
<ul style="list-style-type: none"> • password protection for VPN 	Yes
<ul style="list-style-type: none"> • encrypted data transmission 	Yes
<ul style="list-style-type: none"> • switch-off of non-required services 	Yes
<ul style="list-style-type: none"> • SysLog 	Yes

Product functions / time	
Protocol / is supported	Yes
<ul style="list-style-type: none"> • NTP 	Yes
Product component / Hardware real-time clock	Yes
Product feature / Hardware real-time clock w. battery backup	Yes
Accuracy / of the hardware real-time clock / per day / maximum	1.8 s
time synchronization	
<ul style="list-style-type: none"> • from NTP-server 	Yes
<ul style="list-style-type: none"> • from control center 	Yes
<ul style="list-style-type: none"> • from mobile network provider 	Yes
<ul style="list-style-type: none"> • PC 	Yes
<ul style="list-style-type: none"> • manual setting 	Yes

Further information / Internet-Links	
Internet-Link	
<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/industry/infocenter
<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	<p>Siemens provides products and solutions with industrial security functions that support the secure operation of plants, solutions, machines, equipment and/or networks. They are important components in a holistic industrial security concept. With this in mind, Siemens' products and solutions undergo continuous development. Siemens recommends strongly that you regularly check for product updates. For the secure operation of Siemens products and solutions, it is necessary to take suitable preventive action(e.g. cell protection concept) and integrate each component into a holistic, state-of-the-art industrial security concept. Third-party products that may be in use should also be considered. For more information about industrial security, visit http://www.siemens.com/industrialsecurity. To stay informed about product updates as they occur, sign up for a product-specific newsletter. For more information, visit http://support.automation.siemens.com. (V3.4)</p>

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