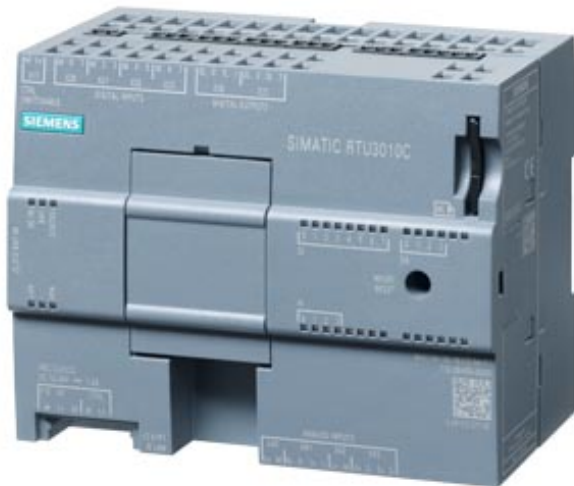


Product type designation

RTU3010C

SIMATIC RTU3010C compact low-power RTU; Battery or solar-operated; connection ext. power supply 10.8 V to 28.8 V DC; Connection external Modems; Connection to Telecontrol Server Basic DNP3, IEC 60870-5-104 and SINAUT ST7 protocols; onboard I/Os: 8 DI, 4 DO, 4 AI; FTP client; Configuration/diagnostics via web server; Time synchronization; E-mail; SD card slot,



Operating mode

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

Transfer rate

Transfer rate

- for Industrial Ethernet

10 ... 100 Mbit/s

Interfaces

Number of interfaces / acc. to Industrial Ethernet

1

Number of electrical connections

- at the 1st interface / acc. to Industrial Ethernet
- for power supply

1

1

Number of slots

- for memory cards

1

Type of electrical connection

- at the 1st interface / acc. to Industrial Ethernet

RJ45 port

Type of electrical connection

- for power supply

5-pole plugable terminal block

Slot version

- of the memory card

SD 1.0, SD 1.1, SDHC, Siemens SMC

Storage capacity / of the memory card / maximum design of the removable storage / C-PLUG	32 Gbyte 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 • Note 	No over external, IP-based router

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 	14 mA 35 mA 55 mA 0.28 mA 71 mA

— in communication mode / typical	125 mA
Power loss [W]	without connected consumers
Power loss [W] / with external supply voltage / at 24 V DC	
• in standby mode / typical	0.34 W
• in update mode / typical	0.85 W
• in communication mode / typical	1.25 W
Power loss [W] / with battery operation / at 7.2 V DC	
• in standby mode / typical	0.002 W
• in update mode / typical	0.51 W
• in communication mode / typical	0.9 W

Ambient conditions	
Ambient temperature	
• for vertical installation / during operation	-40 ... +60 °C
• for horizontally arranged busbars / during operation	-40 ... +70 °C
• during storage	-40 ... +70 °C
• during transport	-40 ... +70 °C
Relative humidity	
• 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
Width	130 mm
Height	100 mm
Depth	75 mm
Net weight	0.34 kg
Mounting type	
• 35 mm DIN rail mounting	Yes
• wall mounting	Yes

Performance data	
Number of users / email addresses / definable / maximum	20
Number of user groups / definable / maximum	10
Number of program block types	42
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	

<ul style="list-style-type: none"> • as client / by means of FTP / maximum 	1
Number of entries / in the FTP buffer / maximum	12
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; http and https can be combined (max. number of 2 connections cannot be exceeded).
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • Node station 	No
<ul style="list-style-type: none"> • substation 	Yes
<ul style="list-style-type: none"> • TIM control center 	No
Control center connection	IEC 60870-5-104, DNP3-capable control stations, SINAUT ST7cc/sc, TeleControl Server Basic
<ul style="list-style-type: none"> • 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

- with HART IP protocol

Yes

Product functions / Diagnostics

Product function / Web-based diagnostics

Yes

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

- password protection for Web applications
- password protection for teleservice access
- password protection for VPN
- encrypted data transmission
- switch-off of non-required services
- SysLog

Yes

Yes

Yes

Yes

Yes

Yes

Product functions / time

Protocol / is supported

- 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

- from NTP-server
- from control center
- PC
- manual setting

Yes

Yes

Yes

Yes

Further information / Internet-Links

Internet-Link

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

<http://www.siemens.com/simatic-net>

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

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

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

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

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

Security information

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)

last modified:

05/12/2020