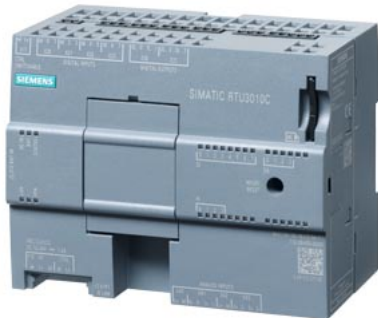


product type designation



RTU3010C

SIMATIC RTU3010C compact low-power RTU; battery or solar-operated; connection ext. power supply 10.8 V to 28.8 V DC; connection of external modems; connection to TeleControl Server Basic, loadable protocols: DNP3, IEC 60870-5-104, SINAUT ST7 or MQTT, onboard I/Os: 8 DI, 4 DO, 4 AI; FTP client; configuration/diagnostics via web server; time-of-day synchronization; email; 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 / according to Industrial Ethernet

1

number of electrical connections

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

1

1

number of slots

- for memory cards

1

type of electrical connection

- at the 1st interface / according to Industrial Ethernet

RJ45 port

type of electrical connection

- for power supply

5-pole pluggable terminal block

slot version

- 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 • 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 — in communication mode / typical | 14 mA 35 mA 55 mA 0.28 mA 71 mA 125 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 1.25 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 0.9 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 |
| width | 130 mm |
| height | 100 mm |
| depth | 75 mm |
| net weight | 0.34 kg |
| fastening method | |
| <ul style="list-style-type: none"> • 35 mm top hat DIN rail mounting • wall mounting | Yes Yes |
| product functions / cloud connectivity | |
| protocol / is supported | |
| <ul style="list-style-type: none"> • Message Queuing Telemetry Transport (MQTT) | Yes |
| product function / for cloud connectivity | |
| <ul style="list-style-type: none"> • trigger management • time stamping | Yes Yes |
| product feature / for cloud connectivity / buffered message frame memory | 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 | |
| • 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). |
| • as email client / maximum | 1 |
| number of free texts / for emails and SMS / maximum | 20 |
| number of characters / per free text for emails or SMS / maximum | 160 |
| number of entries / in the email 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 |
| • by means of demand-oriented connection | supported |
| protocol / is supported | |
| • DNP3 | Yes |
| • IEC 60870-5 | Yes |
| • SINAUT ST7 protocol | Yes |
| product function / data buffering if connection is aborted | Yes; number of telegrams for: IEC 60870: approx. 5,000, DNP3: approx. 10,900, SINAUT ST7: approx. 7,700, TeleControl Server Basic: approx. 10.900 |
| data volume / 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 | |
| • program download with SIMATIC STEP 7 | No |
| • remote firmware update | Yes |
| • remote configuration | Yes |
| product functions / management, configuration, engineering | |
| configuration software | |
| • required | No, configuration by using the integrated webserver |
| product function / gateway / for SIMATIC PDM | |
| • 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; OpenVPN client |
| product function / with VPN connection | OpenVPN |
| type of encryption algorithms / with VPN connection | AES-128, AES-256 |
| 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 | Yes |
| • password protection for teleservice access | Yes |
| • password protection for VPN | Yes |
| • encrypted data transmission | Yes |
| • switch-off of non-required services | Yes |
| • SysLog | 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 | Yes |
| • from control center | Yes |
| • PC | Yes |
| • manual setting | Yes |
| standards, specifications, approvals / hazardous environments | |
| certificate of suitability / CCC / for hazardous zone according to GB standard | Yes |
| • as marking | Ex nA IIC T4 Gc |
| further information / internet links | |
| internet link | |
| • 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 | http://www.siemens.com/industry/infocenter |
| • to website: Image database | http://automation.siemens.com/bilddb |
| • to website: CAx-Download-Manager | http://www.siemens.com/cax |
| • to website: Industry Online Support | https://support.industry.siemens.com |
| security information | |
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