Designation: Industrial-grade remote terminal unit (RTU)

Processor: 32 bits ARM9, 400MHz

Clock: Real-time clock with lithium battery backup

Memory:
- 32MB NOR Flash
- 64MB DDR2 SDRAM
- 1MB SRAM with lithium battery backup

Toggle switch: Run – Stop – Reset

Communication:
- Ethernet (10/100), USB, Serial (RS-232/RS-485) and optional LTE/4G modem
- TG2-xxx-4W: 12 LTE Bands (4G), 7 UMTS/HSPA+ Bands (3G) and 4 GPRS/EDGE Bands (2G)
- TG2-xxx-S: One additional full RS232 serial port

Power supply:
- DC powered, 9 to 30VDC, solar panel can be used
- Card consumption is typically 1.2W @ 24VDC

Power backup:
- Embedded battery charger, 13.8VDC temperature compensated
- For sealed lead acid batteries only; recommended model: 12V, 7Ah

Connectors:
- Spring-cage terminal blocks for power, RS-232 and RS-485

Operating System:
- Linux Kernel with TBox Telecontrol stack

Programming:
- Via TWinSoft Suite (including WebForm Studio and Report Studio)

Languages:
- Ladder logic, Basic & Function blocks (IEC 61131-3)
- and optional C/C++ add-ons

Alarm handling:
- Smart alarm management with embedded calendar

Data logging:
- Smart data logging: Sampling tables (periodic) + digital & analogue chronologies (event). Up to 250 000 timestamp data. Possible expansion on SD card.

SCADA compatible:
- TView, iTouch, iFix, Control Maestro, CITECT, Topkapi, Cube, Labview, Panorama, Scope-X, VTScada

Remote upload:
- Up to firmware level

IT features:
- HTTP(S), FTP(S), SMTP(S) & POP3(S), SNMP, IP forwarding, DynDNS, NTP, SSH/SCP/SFTP

Protocol support:
- Support for over 40 protocols, including Modbus (master/slave, RTU/TCP/ASCII), DNP 3.0, IEC 60870-5-101/104, OPC UA, MQTT(S), Siemens ISO-on-TCP, Allen Bradley DF1 & EtherNET/IP, IEC-61850 (MMS) and many more

Security:
- Firewall, 4 levels of authority, HTTP Session Authentication, SSL/TLS & X.509 Certificates, IEEE802.1X

Size:
- 150mm (H) x 83mm (D) x 29mm (W) / 5.91” x 3.27” x 1.4”

Weight:
- 515gr/18.17oz

Mounting:
- DIN rail fixing

Temperature:
- Storage: -40°C to +80°C / -40°F to 176°F
- Working: -40°C to +70°C / -40°F to +158°F

Humidity:
- 0-95% non-condensing

Material:
- Proprietary aluminium enclosure, Alodine coating against corrosion

Approvals:
- CE, UL/CSA, FCC, IC, RCM, RED, Class I Div.2, IEC 60068-2-6/27/31/64

MTBF:
- >1,000,000 hours, statement available upon request