# **MINI RTU by ELSETA**

# **Features**

**Mini RTU** by **ELSETA** is the most versatile modular solution for automating secondary substations and overhead lines. Due to its compact size (just 12 x 2 x 10 cm) **MINI RTU** is ideal for retrofit projects where installation space is limited.

**Mini RTU** by **ELSETA** collates up to 2000 signals (together with I/O modules) for direct routing to SCADA systems over IEC60870-5-101, IEC60870-5-104, DNP3, Modbus or IEC61850 (optional) protocol. **MINI RTU** by **ELSETA** communicates with the control center through an integrated 2G/3G/4G(LTE) modem. LAN and WiFi interfaces for easier configuration and access are also available.



You can combine different input/output modules for system extension. The core **WCC Lite** unit communicates with I/O modules through Modbus (RTU) or IEC60870-5-103 protocol. Adding and configuring each I/O module is almost PlugnPlay.

### **Features**

- 1xRS485/232; 1xRS485; 2xEthernet
- 1 x Digital Input
- WIFI, 2G/3G/4G(LTE) integrated communication
- 2 SIM card modem
- PLC logic
- Internal memory: SD card
- RTC clock and NTP server/client
- Hardware Watchdog
- Alarm management
- User management
- Cyber security according to industry standards
- Syslog event to remote server
- SOE event management
- Web-based configuration
- Detailed information on connected devices
- Network traffic monitoring and filtering
- Plug'n'Play configuration for I/O modules
- Remote Authentication Dial-In User Service (RADIUS)

### **Supported protocols**

- Modbus master / slave (RTU / ASCII / TCP)
- M-bus master (Serial/TCP)
- IEC 60870-5-101 master/slave
- IEC 60870-5-103 master
- IEC 60870-5-104 master/slave
- DNP3 master/slave
- IEC 61850
- DLMS
- Transparent tunnel from TCP to Serial
- MQTT or Restful API as optional

#### IOMOD 16DI & 8DI8DO

- 16 digital inputs (IOMod 16DI)
- 8 digital inputs/8 digital open
- collector outputs (IOMod 8DIDO)Configurable input signal
- polarity and inversion
- Galvanically isolated inputs
- Configuration through USB
- Drag'n'Drop firmware upgrade
- Modbus over RS485
- IEC 60870-5-103LED indication
- LED Indication
  DIN rail mount
- DIN rail mount

#### **IOMOD 8AI**

- 8 analog inputs
- Data measurement in
- 16bit resolution
- Data scaling and casting
- Configuration through
- USB • Drag'n'Drop firmware
- upgrade
- Modbus over RS485
- IEC 60870-5-103
- Software selectable termination resistor on RS485
- LED indication
- DIN rail mount

#### **IOMOD 4RTD**

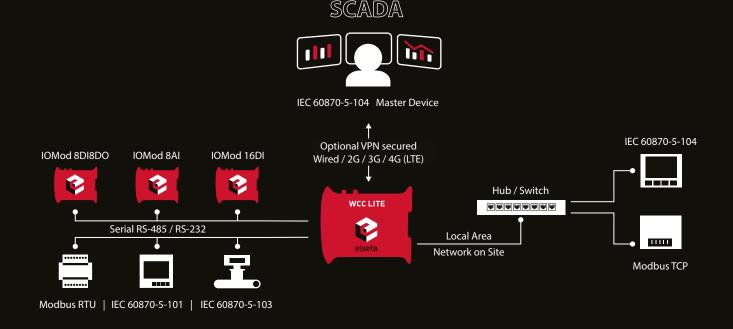
- 4 analog inputs
- 4 temperature sensors

• Selectable PT100 or PT1000 temperature RTD sensor (2, 3 or 4 wires) for all channels

• Temperature measurement of 0.5°C accuracy

• Temperature sensing range: from -200 to 800 °C

- Configuration through USB
- Drag'n'Drop firmware
- upgrade
- Modbus over RS485
- IEC 60870-5-103
- LED indication
- DIN rail mount



Mini RTU is an ideal solution for distribution substations and MV switchgears:

- Operating temperature ranges from -40 to +85 °C, enabling Mini RTU to work in roughest weather conditions
- One of the highest cyber security levels in the market
- Integrated communications: 2G/3G/4G(LTE), WiFi or LAN interfaces on-board, with dual SIM modems for highest reliability
- Easily scalable by combining individual I/O modules via Plug'n'Play
- Long product life-cycle and high investment security



**ELSETA** is a company focused on smart city and smart grid technologies. We specialize in substation and industrial automation, as well as innovative project development.

**Simplifying complexity** is our key to cutting-edge product development. More about **ELSETA** products: www.elseta.com