



Mini

Remote Terminal Unit



“A Compact, Ultra Low Power RTU for all Remote Monitoring and Logging Applications”

Industrial Design

The Mini RTU is a small and cost-effective Remote Terminal Unit which uses Mobile Data to send status and alarm information to SCADA servers. The unit can monitor a small number of analogue and digital signals and includes options for pulse counting, calculations and automated relay output.

The Mini RTU has a high performance and low power processor. The Mini can also operate as a stand-alone data Logger. Its internal battery that will last for years when the logger is configured in a low-power mode.

Industrial grade components allow the RTU to be used in extremes of temperature -30 to +75°C.

As standard, the RTU is supplied in an IP67 rated, rugged polycarbonate enclosure with a hinged lid providing easy access to the input terminals.

The Mini RTU allows data to be collected from a wide range of external field devices, including VSD's, PLC's and Intelligent Meters.

Monitoring Options

The RTU provides termination for the following physical inputs:

- ✓ 2 Analogue Current Loop Inputs
- ✓ 2 Analogue Voltage Inputs
- ✓ 1 Potentiometer Input
- ✓ 3 Digital Inputs / Pulse Counter

External sensors can be powered from the RTU, to prevent them consuming power whilst the unit is a sleep in low power mode.

Additional I/O can be achieved by adding expansion modules.

Extra Features

- ✓ Data Logger Function (up to 16GB micro SD-card)
- ✓ Up to 8 Calculation Channels (e.g. polynomial to calculate flow from a stream level)
- ✓ Up to 8 Aggregation Channels (e.g. to record 2 or 10 minute windspeed averages sampled at 1Hz)

Data Communications

The Mini RTU has a built-in 4G cellular modem supporting LTE-M (Cat-M1), NB-IoT with 2G fallback. Fitted with an integral GSM antenna as standard, with an optional external antenna. Data can be pushed to a central host by HTTP(s), FTP(S), e-mail, secure TCP or MQTT at configurable intervals and optionally via satellite (Iridium Short Burst Data (SBD)).

- ✓ Alarming by SMS, e-Mail or MQTT

Expansion Modules

I/O capacity can be increased by adding up to three expansion modules, one of each type.

Type OI	2 Inputs for additional sensors/inputs
Type OI-COM	1 additional serial input port.
Type OI-AX	2 Aux Input for pre-processed sensors/inputs
Type OI-OO	2 Aux Output for Open Collector outputs

Options

- ✓ Serial - one serial port (RS232/RS485/SDI-12) to capture measurements from ASCII, MODBUS, NMEA or SDI-12 sensors.

- ✓ JPG Camera or Integrated Colour TFT Display.

System Health Monitoring

The Mini RTU has sensors for self-monitoring:

- ✓ Ambient Temperature Sensor
- ✓ GSM Signal Strength
- ✓ Battery Voltage and Usage.

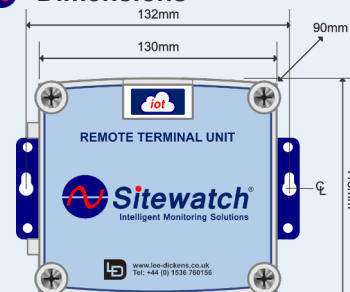
Signal I/O Connection

All signal connections are wired to plug-in screw terminals located within the RTU enclosure.

Power Supply Options

- ✓ 8..30V DC input
- ✓ Solar (PV)
- ✓ Bulk Battery

Dimensions



“Ideally suited for use with the Sitewatch® *Anywhere* Cloud Based Telemetry (IIoT)”

- ✓ Silo and Tank Farms
- ✓ Rivers, Streams, Culverts, Irrigation channels
- ✓ Flood/Environmental Monitoring
- ✓ LNG and CNG Compressor Packages
- ✓ Waste Compactors, Tippers (Static/Portable) and much more ...



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