

Micro

Remote Terminal Unit

Technical Data



“A simple, easy to install, Self Powering, Low Cost, Remote Monitoring Solution”

Operation

The Micro RTU is a very low cost self powered RTU designed to provide a robust and economical solution for small remote monitoring applications.

The RTU communicates via any of the Cellular Networks. The unit includes a stub antenna and can be supplied with a SIM card.

The RTU's Microprocessor is programmed to:

- read and monitor its input signals
- check for High and Low alarms
- automatically report site status

“Use your Mobile Phone to Monitor and Configure your Site.”

By using its configurable alarm settings and reporting intervals the Micro RTU can automatically send you updates of your site's status.

Configuration options can be set using SMS (the text message service).

Communications

The Micro RTU communicates over any cellular network using SMS and Mobile Data (GPRS). The Micro RTU is designed for use:

- Standalone, direct to your mobile phone
- with L-D Web-based Monitoring Service
- with L-D Sitewatch SCADA System

Inputs / Outputs

As standard the Micro RTU has one 4-20mA analogue input and an integral temperature sensor. Other options available are:

- Voltage Inputs
- Digital Inputs
- Digital Outputs

For additional requirements please contact our sales department.

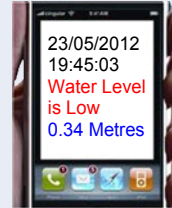
Expansion Options

An LCD that displays the most recent analogue input reading can be supplied.

Our sales team are always happy to offer advice.

System Health Monitoring

The RTU monitors its internal battery voltage, supplementary supply voltage and network signal strength.



“Receive Alarms and Site Status on your Mobile Phone.”

Industrial Design

The Micro RTU is supplied in an IP66 Die Cast Aluminium Enclosure which allows for very simple and quick installation on any building and plant surfaces.

The lead free components and manufacturing meet the current environmental regulations (RoHS). The use of industrial grade components allows the RTU to be used in both high and low extremes of temperature.

Physical Interconnection

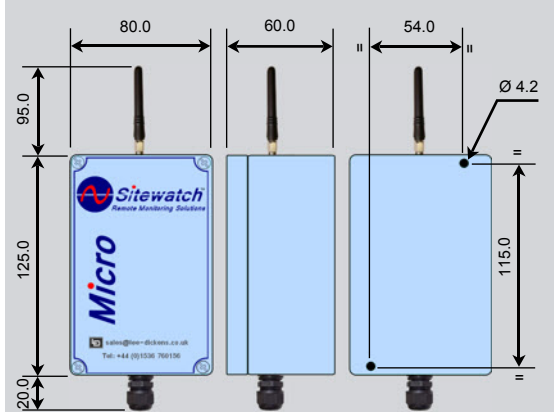
All connections are made by screw terminals located within the RTU enclosure.

Power Supply

Typically, no external supply is required - The Micro's internal battery is charged from the current loop! However supplementary supplies can also be used, including:

- Current Loop Powered
- Solar Powered
- Wind Powered
- Local DC Supply (5 to 30vdc)

Dimensions (mm)



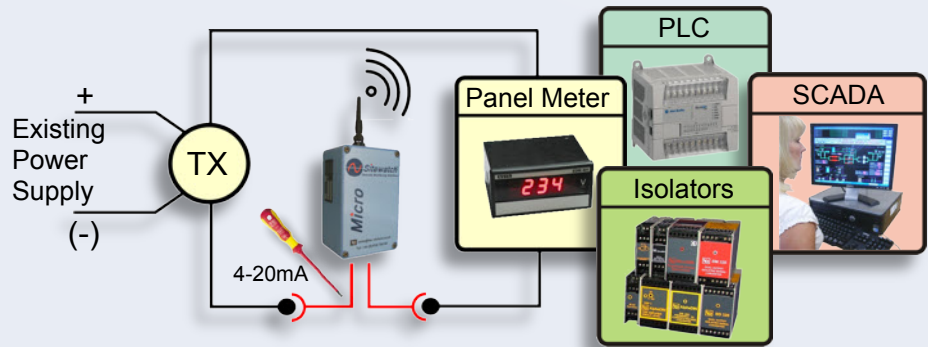


Monitoring Solutions

Remote Monitoring examples:

- Silo Levels
- Sugar Silos
- Flour Silos
- Powder Silos
- Granular Silos
- Tank Levels
- LPG Tanks
- Chemical Tanks
- Waste Water Tanks
- Clean Water Tanks
- Pollution Monitoring
- Emissions
- Noise Monitoring
- Fuel Interception
- Petrol Interceptor
- Flood Warning
- Lagoons
- Fish Farms
- Ponds
- Swimming Pools
- Pump Chambers
- Wet Wells
- Dry Wells
- Remote Equipments
- Wind Farms
- Meter Reading
- Pump & Motor Status
- Generators
- Compressors
- Air Conditioning Units
- Refrigeration Units
- Intruder Detection
- Home Security
- Farm Building Security
- Mobile Home Security
- Vehicle Temperature
- Pressure
- Cattle Transport
- Temperature & Humidity

Example: Two Wire Connection - Loop Powered



Incorporate the Micro RTU into existing circuits at site, such as digital panel meters, PLCs, Trips Amps, Isolators or local SCADA systems.

Typical Micro RTU Application

Micro RTU transmits your level data off-site direct to your mobile phone or web page.

Micro RTU supports GPRS & GSM mobile data communications

Your own secure, password protected Web page. Graphical status and history displayed.



4-20mA output from level sensor connected to Micro RTU input circuit.

SMS SMS

Text and email alerts provide you with protection 24/7.

Principle of Operation

The Micro RTU transmits data off site and can be installed anywhere on any current loop circuit. It needs no external power supply. The Micro RTU communicates using the Mobile Data Networks and requires a SIM card, which can be supplied with the unit. The RTU can be configured using your mobile phone. The Micro RTU will monitor its input and when any alarm limit is breached a text message alert will be sent. Live updates can be requested by sending a text message to the RTU

Text Only Service: The Micro RTU will report its status direct to your mobile phones.

Web Service: We will provide you with a secure, password protected Web Page. The Micro RTU will report its status to the Lee-Dickens Data Centre via Mobile Data (GPRS). The data centre will automatically show the current and historical information on your Web page. In addition, you can also configure multiple mobile phones and Email addresses, providing you with protection 24/7.



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