



DATASHEET **RTU**

Certification (RTU)

CE 0518

Ex II 1 G Ex ia IIB T4 Ga

Class I, Zone 0, AEx/Ex ia IIB T4
Class I, Division 1, Groups C & D, T4 'Exia'
-40° C < Ta < +60° C

Certification (c.Log500.RTU)

CE 0518

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The **RTU** (Radio Transmitter Unit) is a device designed to allow remote monitoring of **LPG/Fuel/Oil** storage tanks, **AMR** (automatic meter reading) and other parameters in industrial installations.

This device has the ability to monitor tank level, temperature, pressure and meter readings and to send data to a logger wirelessly.

The radio unit is programmed to collect the readings from the sensors (several times a day) and retransmit it by radio (868/915MHz) to a central unit, acting as Gateway (c.Log, iLogger or ISAhub).

It is possible to create a wireless mesh network, where **RTU** relays data from other **RTUs**. This network topology increases the solution coverage and achieves a sizeable cost reduction by the use of a single logger.

The **RTU** is supplied by a battery which provides long term service and makes the installation process easier.

Features

- Installation in less than 5 minutes
- Analog and digital inputs
- Maintenance-free
- Battery replaceable on the field
- Extended battery supply
- Mesh network

Multiple applications

- Remote tank level monitoring
- Automatic meter Reading
- Pressure monitoring (gas, water or others)

SPECIFICATIONS

Functionalities

Analog inputs: up to 1 inputs (0-3,6V, 0-5V or 0-12V)

Digital inputs: up to 2 inputs with Frequency meter up to 100Hz (with internal pull-up for connection to meters with relay/reed output or open collector).

Sensor Acquisition/Reading frequency: 1, 10, 60 or 1440 minutes (depending on the model)

Communication frequency: configurable from 15 minutes up to one time a day

Sensor availability: Supports Rochester, Huba, Keller and Cotrako Sensors

Supply availability: 3,6V, 5V or 12V

RF Features

Operating frequency: 868/915 MHz

Output power: 10mW

Sensitivity: -100 dBm (typical receiver sensitivity)

Range: 30 meters with obstacles; 300 meters for line-of-sight

Network topology: Star topology or Mesh Topology

Power supply

Battery type: Primary, Lithium, replaceable.

Battery life: Up To 10 years (depending upon the Transmission parameters set)

Operating conditions

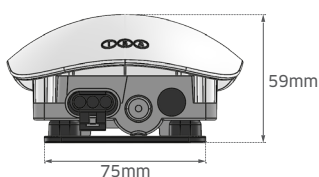
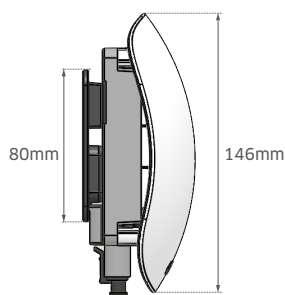
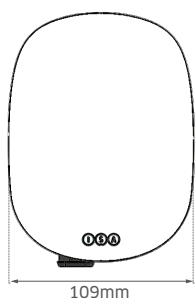
Temperature: -40°C to +60°C

Humidity: 10% to 90%

Enclosure Features

Dimensions: 146mm x 109mm x 59mm

Protection Index: IP68



Model	Sensor	Sensors Reading Frequency (min)	Transmission Frequency (min)	Output	Operating Frequency (MHz)	Supply
Ex.RTU.500.RCH Ex.c.Log500.RTU.K1 *	Rochester Junior, Senior and Magnetel	10	60	0-100%	868 / 915 Mhz	3,6V
Ex.RTU.502.PLUS	4~20mA	60	60	0-100%	868 / 915 Mhz	12V
Ex.RTU.502.HUB	HUBA	60	60	0-4096	868 / 915 Mhz	5V
Ex.RTU.500.M2 Ex.c.Log500.RTU.M2 *	2 Meters	NA	24(h)	Pulses	868 / 915 Mhz	NA
Ex.RTU.500.M4	4 Meters	NA	24(h)	Pulses	868 / 915 Mhz	NA
Ex.c.Log500.RTU.D2.915 *	2 Binary State	10	60	0/1	868 / 915 Mhz	NA

*For US market