



Telog RS-33u

WIRELESS BATTERY-POWERED RTU FOR ABOVE GROUND MONITORING

COLLECT, ANALYZE AND UNDERSTAND YOUR DATA

Collecting, analyzing and understanding data from networks of recording sites is a challenging task. The Telog's RS-33u recording system offers you a versatile, economical and comprehensive solution to keep up with the data acquisition demands of today.

The Telog RS-33u provides real-time monitoring and alarming of instruments and sensors in a system package so flexible it can be customized for each application to provide you with the information you need in a concise, presentable format.

Communication Options

The power of every 33 series recorder from Trimble Telog is wireless data transfer capability. Using cellular technology enables unmanned monitoring of remote sites as well as instant updates and alarm notifications. The Telog RS-33 systems employ a Telog proprietary, low power m2m cellular modem certified for operation on the Verizon Wireless and Sprint cellular networks in addition to an Ethernet option.

Collecting Data

The RS-33u supports multiple sensor interface options including RS-232, RS-485, one analog and one digital input. For example, when connected to an open-channel flowmeter via RS-232, the RTU can interrogate the meter for it's most recent level, flow velocity and battery voltage measurements. PLCs, flowmeters, Sondes, etc. are also supported using a generic MODBUS client. The new MODBUS interface can be configured easily within Telog's Enterprise software.

Telog also provides optional sensors that may be directly attached to the RS-33u including ultrasonic and pressure level, water quality Sondes, pH and conductivity, temperature, level switches and a rain gauge.

Packaging

The cellular modem (if used), antenna, data recorder and battery are integrated into an environmentally rugged NEMA 4x enclosure measuring 13"L x 11"W x 6"H [330mm x 279mm x 152mm].

Power Options

The Telog RS-33u system has low power requirements allowing for a variety of power options. These are utility power with or without battery backup UPS function, solar, external DC or primary battery.

Software Support

Trimble Telog wireless recorders are compatible with all Telog software applications, including Telog Online (cloud), Telog Enterprise and Telogers for Windows application software. This ensures that utilities have a complete solution addressing all their remote monitoring requirements delivered in a manner that suits each individual utility's operations and IT needs.



Applications Include:

- ▶ Popular open-channel wastewater flowmeters
- ▶ Pressure level sensors
- ▶ Ultrasonic level sensors
- ▶ Water quality sensors and Sondes
- ▶ MODBUS supported instruments, e.g. PLCs, RTUs, etc.

Benefits

- ▶ NEMA 4x enclosure and IP67 rated
- ▶ Battery operated
- ▶ Cellular m2m
- ▶ Data backup
- ▶ Submersible enclosure

Features

Variety of communication options:

- ▶ Cellular
- ▶ Ethernet

Power options:

- ▶ Battery only
- ▶ AC/DC 12VDC power supply with battery backup
- ▶ Solar with battery

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RECORDER MODEL: Telog RS-33u

- Type:**
Multi-channel RTU (Recording Telemetry Unit)
- Recording**
Sample Rate Programmable from 1/sec up to 8 hours; each channel
Data Interval Programmable from 1/sec up to 8 hours; each channel
- Memory**
Size: 270 Kbytes
Storage Method Wrap around (first-in; first-out)
Data Capacity Dynamically allocated to active channels, any combination of:
- Analog Input 150,000 values
- Pulse Input 110,000 values
- Event Input 37,000 values
- ComSensor Input 55,000 values
- Communication:**
Standard:
- 5 pin circular connector rated IP-67
- Auto-selected baud rate to 19.2 Kbaud
Cellular Internal Telog LTE Category 1 certified
- Certified on Sprint & Verizon in USA
- WM/H HSPA modem certified on Bell in Canada
- Dual band internal antenna

- Inputs**
Limited to one ComSensor + one analog + one digital
ComSensor/Meter
- ComSensor/meter Selectable RS-232 or RS-485 to 19.2 Kbaud. Protocol determined by meter or sensor
- Analog**
- Selectable Ranges 0-1 VDC, 0-5 VDC, 4-20 ma
- Excitation Pulsed +5 or +12 VDC, (selectable duration)
- Resolution 0.025%; 12 bits
- Accuracy ±0.1% of full range at 70°F ±50 ppm
- Digital (one channel)**
- Type Selectable pulse counter or event recorder
- Input Contact closure or logic driven input
- Excitation 5 VDC at 20 µAmps (max)
- Pulse Width10 mS minimum

- Enclosure**
Size: 13"L x 11"W x 6"H [330mm x 279mm x 152mm]
Rating NEMA 4x

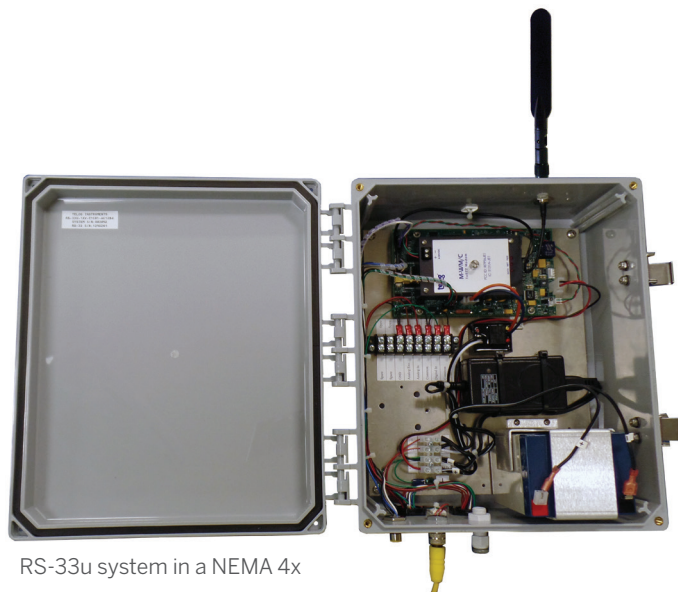
- Environmental**
Temperature 32 to 160°F [0° to 71°C] -22 to 160°F [-30 to 71°C] powered externally
Rating NEMA 4x

- Support Software**
S-3PC Telogers for Windows®
S-3EP Telog® Enterprise
DHS-Service Telog Online
TW-UNITY Trimble Unity

- Supported sensors**
Pressure Level Sensor Submersible pressure sensor
- Model Telog PT-3Vu
- Ranges 0-5 PSI thru 0-300 PSI
- Accuracy ±0.25% of full scale
- Construction 316 stainless steel
- Vent In-line dry box with user replaceable desiccant
- Ultrasonic Level Sensor Ultrasonic transmitter (ComSensor)
- Model UT-33u/95
- Frequency 95 KHz
- Range One foot to 13 feet [304mm to 3962mm]
- Beam Angle 8° conical
- Accuracy ±0.25% over any range segment exceeding 12" [305mm] (homogeneous environment)
- Float Switch
- Model A-FSu

SPECIFYING AN RS-33U TELOG RECORDING TELEMETRY UNIT

1. Select a Communication Option
 - L1v LTE/1 on Verizon network.
 - L1s LTE/1 on Sprint network
 - HSPA High Speed Packet Access
 - eNET Ethernet Communication Module
2. Specify a Power Source
 - B10A 10-amp-hour alkaline battery pack
 - B10L 10 amp-hour lithium battery pack
 - ACP 120 VAC-15VDC plug-in power supply
 - AC12 120/240 VAC to 12 VDC panel mount power supply
 - AC12B4 AC to 12 VDC with battery backup
 - S5/4 5 Watt solar power with 4 amp-hour rechargeable battery
3. Specify a Product Model Number
 - RS-33u-Communication-Enclosure-Power
 - Example: RS-33u-L1V-E1C01-AC12B4



RS-33u system in a NEMA 4x

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A TRIMBLE COMPANY

830 Canning Parkway
Victor, NY 14564 USA
Phone: 585.742.3000
Fax: 585.742.3006
TrimbleWater_ContactUs@trimble.com
www.trimblewater.com