UNDERGROUND MONITORING IN HARS ENVIRONMENTS

The Telog Ru-35 provides real-time monitoring and alarming of flow, pressure and water quality instruments and sensors found in the harsh environments of sewers and underground water vaults. When you combine the Telog Ru-35 RTU with a Trimble Telog software option, you have a powerful system of wireless wastewater infrastructure monitoring that is consistently delivering real-time data and alarms from the field, straight to your desktop or browser. This enables Situational Awareness of the performance of the collection system, improves regulatory compliance and enables network modeling calibration.

Sensor Support
The Telog Ru-35 supports multiple sensor interface options including RS-232, RS-485, analog and digital inputs with MODBUS, SDI-12 and I2C protocol monitoring. For example, when connected to an open-channel flowmeter via RS-232, the RTU can interrogate the meter for its most recent level, flow velocity and battery voltage measurements. Trimble Telog also provide optional sensors that may be directly attached to the Telog Ru-35 including ultrasonic and pressure level, water quality Sondes, temperature, level switches and rain gauges.

Wireless Communication
Using cellular technology enables unmanned monitoring of remote sites as well as instant updates and alarm notifications. The Ru-35 uses a low power, 4G LTE/Cat 1 cellular communication modem certified on multiple cellular systems. This ensures maximum coverage, reliability of service and alignment with cellular carriers technology roadmaps.

Collecting Data
The Telog Ru-35 may be configured to call its host server on a schedule (e.g. once per day; every four hours, etc.) and/or in response to site alarm conditions (e.g. in response to a high level event). Data may be stored in the recorder at user defined intervals (e.g. five minutes, one minute, etc.) without concern for data loss, because the recorder will store from 150,000 to 670,000 values, depending on input type, before overwriting the oldest data.

Packaging
The cellular modem, antenna, process signal conditioning, data recorder and battery are integrated into an IP68 rated, environmentally rugged package weighing nine pounds (four Kg) and measuring cuboid 7.3” (185mm) L x 4.2” (107mm) W x 11.5” (292mm)H.

Battery Powered
This RTU is powered by dual user replaceable 6-volt lantern batteries providing an operating life of six months to two years depending on the sensor interface and call schedules.

Software Support
Trimble Telog wireless recorders are compatible with all Telog software applications, including Telog Online (cloud), Trimble Unity, 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
- Monitoring of popular open-channel wastewater flow meters
- Level monitoring
- Water quality sensors and sondes monitoring

Benefits
- Real-time situational awareness of overflows and high/low level events
- Model asset performance, reduce overflows and pollution
- Increased regulatory compliance
- Reduced confined space entries with wireless configuration

Features
- Wireless communication via 4G LTE cellular and Bluetooth Low Energy
- Alarm notification
- Time stamped events
- User programmable
- IP68 Rating
Telog Ru-35 WIRELESS MULTI-CHANNEL RECORDING TELEMETRY UNIT FOR UNDERGROUND MONITORING

Support Software
- S-3PC: Telogers for Windows® version 6.60 or later
- S-3EP: Telog® Enterprise version 6.60 or later
- DHS-Service: Telog Online
- TW-UNITY: Trimble Unity

TRIMBLE TELOG SUPPLIED SENSORS

Pressure Level Sensor
Model: Telog PT-DSu
Type: Strain gauge pressure sensor
Range Selectable: 5, 10, 30, 100, 300, 1000 PSIG
Accuracy over the calibrated temperature range including zero and span setting and the effects of non-linearity, hysteresis and repeatability: ±0.25% ±0.25% over any range segment exceeding 12 inches (homogeneous environment)
Cable: Vented Polyurethane 0.225" diameter [5.715mm]

Ultrasonic Level Sensor
Model: Telog UT-35u/95 ultrasonic transmitter (ComSensor)
Frequency: 95 KHz
Range: one foot to 13 feet
Beam Angle: 8° conical
Accuracy: ±0.25% or less

FloWav Area Velocity and Level Sensor
Model: PSA-35-AV for A/V Level sensor
Range Velocity: -5 to 20 ft/s
Depth: ±0.1% full scale
Accuracy Velocity: ±2% of reading
Depth: ±1/8" of reading from 32°F to 160°F
Size: 0.9"H x 1.85"W x 6"L with 30 feet of cable

TRIMBLE TELOG SUPPORTED METERS AND SENSORS

Flow meters
- Via RS-232 or RS-485: ADS Flow Shark, ADS Triton, ADS Triton+
- Hach FL900 Flow Meter

Interface to meter:
- Hach Sigma 900 Series
- ISCO 2100 Series

Level Sensors
- Via RS-232 or RS-485: FloWav Stingray (Level)

Sensors:
- Hydrolab Sondes
- Hach Pipe Sonde
- Ponsel C4E & CZTN (Conductivity)

Water Quality:
- Hach Hydrolab Multiparameter Sondes
- DataSonde 4a, MiniSonde 4a
- DS5X, DS5, MS5
- DSSX, DSS, MS5
- Hach Pipe Sonde
- Ponsel C4E & CZTN (Conductivity)

Specifications within this brochure are subject to change without notification. (10/2018)