



Department of Purchasing and Contracting  
NON-COMPETITIVE PROCUREMENT REQUEST FORM

Requesting Department: Watershed Management  
Department Contact Person: Gary V. Kinnemore Telephone: 408 614-4441  
Email: g.kinnemore@clerk@sbcounty.gov

Requisition Number: 72417 Suggested Supplier: Telog Instruments, Inc.  
Estimated Amount of Purchase: \$190,000.00  
Detailed Description of the Goods or Services to be purchased: Telog telemetry products and service

**Emergency** (For Emergency Requests, Please check this box and answer all questions below.)

1. Date and Time of Emergency Occurrence: \_\_\_\_\_

2. Please state the nature of the emergency posing a risk to public health, welfare, safety or resources:

\_\_\_\_\_

3. State how the Estimated Amount was determined to be Fair and Reasonable (attach supporting documentation):

\_\_\_\_\_

**Sole Source** (Please check box and answer all of the following completely.)

1. Provide an explanation why the product, service or supplier requested is the only method that can satisfy the requirements. Please explain why alternatives are unacceptable. Be specific with regard to specification, features, characteristics, requirements, capabilities and compatibility. (Attach additional documents, if necessary):

\_\_\_\_\_

2. Will this purchase obligate us to a particular vendor for future purchases? (Either in terms of maintenance that only this vendor will be able to perform and/or if we purchase this item, will we need more "like" items in the future to match this one?) Explain in detail.

\_\_\_\_\_

3. Explain the impact to the County or Public if this request is not approved.

\_\_\_\_\_

I hereby request that this non-competitive procurement request be approved for the purchase of the above stated work, material, equipment, commodity, or service.

Department Director (Typed/Printed Name) see attached for 17 Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Do Not Write Below – for the Department of Purchasing and Contracting Use Only

Procurement Agent (Typed/Printed Name) Angel Frazier Signature: [Signature] Date: 12/19/17

Interim Procurement Manager (Typed/Printed Name) Phyllis A. Head Signature: [Signature] Date: 12/29/17

Approved  Not Approved

Signature: [Signature] Director, Department of Purchasing and Contracting Date: 1/3/18

P&C Rev. 9/21/2017

Talisa Clark

Print Form

## Public Notice of Proposed Award of Sole Source Procurement

### Section A – Description of Proposed Sole Source Procurement

**Description of Supplies/Services:** Telog telemetry products and service.

**Demonstration of Contractor’s Unique Qualifications:** Telog instruments are used to communicate with Watershed’s water and wastewater distribution system pressure monitoring stations. Telog is the proprietary owner of the software for Watershed’s system, replacement equipment must be compatible with that infrastructure.

### Section B – To Be Completed by the Department of Purchasing and Contracting

#### Market Survey Results

**Date Public Notice posted on website:** November 28, 2017

**Date Public Notice closed:** December 2, 2017

#### Review of Offers

**Were any offers received (Yes/No):** No

**Number of offers received:** 0

**Responders:** None

**Purchasing Agent review and recommendation:** Telog Instruments was founded in 1984 and is a leader in wireless water infrastructure monitoring and management sensors and software solutions. In 2015, Trimble acquired Telog Instruments, Inc. which now operates as a Trimble company within the Trimble Water Division. Trimble’s Water Division specializes in field and office solutions for GIS mapping and work management, field data collection, design and inspection, wireless monitoring and network management for water, wastewater and storm water utilities, manufacturers and service providers around the world. DeKalb County has previously done business with Telog Instruments with the most recent being in 2016 in which they were awarded CPA No. 1025911 as the Sole Source provider for the purchase of Telog Equipment at the Scott Candler Plant. It is my recommendation to approve this request. The total spend by year is as follows:

2017: \$31,410.00

2016: \$25,589.50

2015: \$24,423.00

2014: \$16,470.00

2013: \$2,780.00

2012: \$11,825.50

2011: \$16,289.00

2010: \$228,434.50


2009: \$2,510.00

2008: \$18,115.00

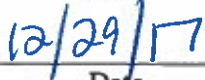


2006: \$7,360.00

  
Agent Signature

  
Date

  
Procurement Manager Signature

  
Date



# Department of Purchasing and Contracting NON-COMPETITIVE PROCUREMENT REQUEST FORM

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SEP 11 11 17

Requesting Department: Watershed Management  
Department Contact Person: Garry V. Kinmore Telephone: 678 614-4444  
Email: gvrkinmore@dekalbcountyga.gov

Name: [Signature]

Requisition Number: 734117 Suggested Supplier: Telog Instruments, Inc.  
Estimated Amount of Purchase: \$ 190,000.00  
Detailed Description of the Goods or Services to be purchased: Telog telemetry products and service.

**Emergency** (For Emergency Requests, Please check this box and answer all questions below.)

1. Date and Time of Emergency Occurrence: \_\_\_\_\_

2. Please state the nature of the emergency posing a risk to public health, welfare, safety or resources:

\_\_\_\_\_

3. State how the Estimated Amount was determined to be Fair and Reasonable (attach supporting documentation):

\_\_\_\_\_

**Sole Source** (Please check box and answer all of the following completely.)

1. Provide an explanation why the product, service or supplier requested is the only method that can satisfy the requirements. Please explain why alternatives are unacceptable. Be specific with regard to specification, features, characteristics, requirements, capabilities and compatibility. (Attach additional documents, if necessary.):

DeKalb County Watershed uses Telog instrument to communicate with both its water and wastewater distribution system pressure monitoring stations. Telog is the proprietary owner of the software for its systems

2. Will this purchase obligate us to a particular vendor for future purchases? (Either in terms of maintenance that only this vendor will be able to perform and/or if we purchase this item, will we need more "like" items in the future to match this one?) Explain in detail.

Yes, Telog makes the communication equipment that DeKalb County uses to communicate with its pressure monitoring stations. Replacement equipment must be compatible with that infrastructure.

3. Explain the impact to the County or Public if this request is not approved.

You risk failing to comply with the EPD/EPA consent decree requirements. This may also negatively impact public health if we cannot ascertain the condition of the distribution system

I hereby request that this non-competitive procurement request be approved for the purchase of the above stated work, material, equipment, commodity, or service.

Department Director (Typed/Printed Name): Scott A. Towler

Signature: [Signature] Date: 10/26/2017

Do Not Write Below – for the Department of Purchasing and Contracting Use Only

Recommendation and Comments

\_\_\_\_\_

Approved  Not Approved

Signature: \_\_\_\_\_, Director, Department of Purchasing and Contracting Date: \_\_\_\_\_

Print Form



**Telog Instruments, Inc.**

A TRIMBLE COMPANY

830 Canning Parkway,  
Victor, NY 14564-8940, U.S.A.

Phone: 585-742-3000 • Fax: 585-742-3006

E-Mail: [TelogSales@telog.com](mailto:TelogSales@telog.com)

December 13, 2017

DeKalb County Purchasing  
Maloof Annex  
1300 Commerce Drive  
Decatur, Georgia 30030

Dear Maloof,

This is to confirm that Telog is the sole source supplier of Telog data recorders and *Telogers Enterprise* Support Software. These products are designed and manufactured exclusively by Telog Instruments, Inc. at our facility in Victor, NY.

Telog recorders are sole source products available only through Telog Instruments, Inc. For Telog Annual Software Maintenance, Telog is the only source for upgrades, and technical support and is the only authorized service center for repairs and service on Telog recorders.

Thank you for your interest in Telog Instruments Inc. Should any questions regarding our products and/or services remain, please feel free to call, write or fax. We look forward to serving your instrumentation needs.

Sincerely,

A handwritten signature in cursive script that reads "Michele Allen". The ink is dark and the signature is fluid and legible.

Michele Allen,  
Inside Sales Manager  
Telog Instruments, Inc.  
A Trimble Company

# RS-33u Recording Telemetry Unit

Wireless RTU For Above Ground Remote Monitoring



RS-33u monitoring a lift station

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

The 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.

The RS-33u has low power requirements and automatically monitors level, flow, pressure and water quality sensors. Data is forwarded wirelessly to a host computer operating Telog host application software. Telogers for Windows or Telog Enterprise. Data communication may be scheduled frequently (e.g. daily, hourly, every five minutes, etc.) and/or immediately in response to site alarm conditions.

The RS-33u supports multiple sensor interface options including RS-232, RS-485, analog and digital inputs. 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. 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.

Wireless communication is supported via packet switched cellular (e.g. 1xRTT or GPRS).

The RTU is powered from a single, 6-volt lantern battery providing an operating life of six months to two years depending on sensor interface and call schedule.

## Directly Monitor:

- Popular Open-channel Wastewater Flowmeters
- Pressure Level Sensors
- Ultrasonic Level Sensors
- Water Quality Sensors and Sondes
- MODBUS supported Instruments e.g. PLCs, RTUs etc.

## Communicate Via:

- Local Connection
- Cellular
- Land-line Telephone
- Ethernet

## Powered by:

- 120/240 AC with battery backup
- Solar panel with battery backup
- Battery only

## Alarm Notification

## MODBUS Input Interface

## Two Year Battery Life

## Web Application Software

RECEIVED

telog

OCT 19 2017

Name:

# RS-33u Specifications

## Recorder

<b>Model Type</b>	Telog RS-33u Multi-channel RTU (Recording Telemetry Unit)
<b>Recording</b>	
Sample rate	Programmable from 1/sec up to 8 hours, each channel
Data Interval	Programmable from 1/sec up to 8 hours, each channel
<b>Memory</b>	
Size	270 Kbytes
Storage method	Wrap around (first-in, first-out).
Data capacity	Dynamically allocated to active channels, any combination of 150,000 values
Analog input	150,000 values
Pulse input	110,000 values
Event input	37,000 values
ComSensor input	55,000 values
<b>Communication:</b>	
Standard	Standard 4 pin circular connector rated IP-67 Auto-selected baud rate to 19.2K Land line telephone Telog M-324 2400 baud modem Auto-dial/Auto-answer FCC and CSA approved
Optional	Cellular data modem Provides both 1xRTT and GPRS packet switched Limited to one ComSensor + one analog + one digital Selectable RS-232 or RS-485 to 19.2 Kbaud Protocol determined by meter or sensor
<b>Inputs</b>	
ComSensor/meter	
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 25° C ±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 width	10 ms minimum
<b>Enclosure</b>	
Size	13"x11"x6" (LxWxH)
Rating	NEMA 4x
<b>Environmental</b>	
Temperature	0 to 70° C -30 to +70° C powered externally
Rating	NEMA 4x
<b>Support Software</b>	
S-3PC	Telogers for Windows
S-3EP	Telogers Enterprise
Data transfer unit	IP-67 rated PDA running Palm OS and Telog application program

## Supported Sensors

<b>Pressure Level Sensor</b>	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
<b>Ultrasonic Level Sensor</b>	Ultrasonic transmitter (ComSensor)
Model	Massa M300/95
Frequency	95 KHz
Range	one foot to 13 feet
Beam Angle	8° conical
Accuracy	±0.25% over any range segment exceeding 12 inches (homogeneous environment)
<b>Temperature Sensor</b>	
Model	AT-3u ambient temperature sensor
Range	-20 to +70° C
Accuracy	±0.2° C
Size	Stainless Steel probe (4" x 1/4") with 10 feet of cable

## Specifying an RS-33u Telog Recording Telemetry Unit

### 1. Select a Communication Option

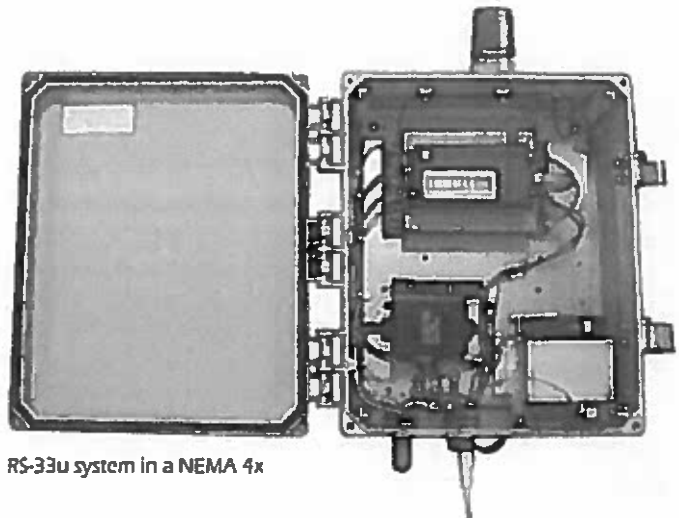
T24	2400-baud telephone Modem
GPRS	GPRS General Packet Radio service
1xRTT	Cellular Packet Modem
eNET	Ethernet Communication Module
SSR	Spread spectrum radio modem

### 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
AC24	120/240 VAC to 24 VDC panel mount power supply
SS/4	5 Watt solar power with 4 amp-hour rechargeable battery

### 3. Specify a Product Model Number

RS-33u-Communication-Power	
Example	RS-33u-1xRTT-B10A



RS-33u system in a NEMA 4x



## Telog Instruments, Inc.

830 Canning Parkway, Victor, NY 14564-8940, USA  
Phone: 585.742.3000 • Fax: 585.742.3006

E-mail: [TelogSales@telog.com](mailto:TelogSales@telog.com) • [www.telog.com](http://www.telog.com)

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Windows is a registered trademark of Microsoft Corporation.  
Palm Pilot is a registered trademark of Palm, Inc.



# Water Distribution System Wireless Monitoring Solutions



**telog**<sup>®</sup>  
A TRIMBLE COMPANY



# WATER DISTRIBUTION MONITORING

Providing water distribution monitoring solutions since 1987, Telog continues to offer the industry's leading remote data acquisition system including the most comprehensive family of battery powered environmentally rugged wireless monitors available from any single supplier.

Telog RTUs provide a monitoring solution for virtually every sensor, meter, instrument and application found throughout water conveyance systems. Telog's data management system delivers information and alarms to your own software application, Telog Cloud Solution or Telog Enterprise.

## TELOG RTUs

Telog 32 Series RTUs (Recording Telemetry Units) are:

- Battery powered
- Cellular enabled
- Environmentally rugged
- Intended to operate for years on-site without maintenance.

All Telog 32 Series recorders include an embedded, low power m2m cellular modem which employs 1xRTT communication protocol in North America on CDMA networks or HSPA communications protocol internationally on GSM networks. This permits deployment of Telog 32 Series RTUs wherever cellular coverage is available and data automatically transfers to any designated host computer connected to the Internet.

Telog host application software Telogers for Windows or Telogers Enterprise supports hundreds of simultaneous communication sessions with remote RTUs to ensure no communications bottleneck.

The Telog 32 series RTUs operate from a single 'D' cell lithium battery that can operate the recorder for more than 5 years while executing more than 3800 cellular calls to its host computer. This would support for example 2 calls/day for 5 years or 10 calls per day for 1 year.

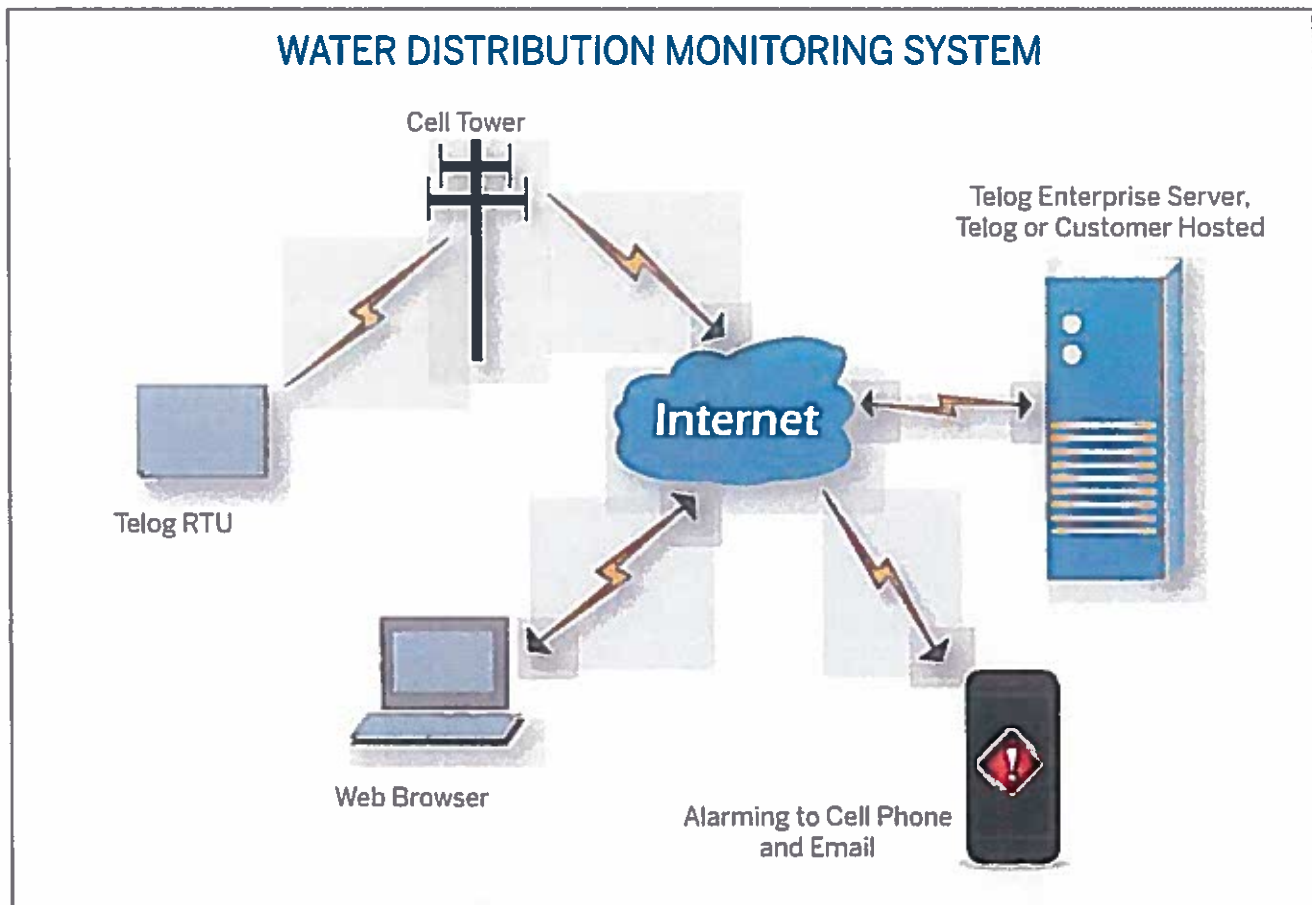
## TELOGERS ENTERPRISE HOST APPLICATION SOFTWARE

Telog's Enterprise Software is a comprehensive, scalable data management system for remote water conveyance systems. It provides real-time alarm and historic data in user configurable reports and web server views of data from remote sensors, instruments and analyzers.

Enterprise manages remote RTU call schedules, alarm configurations, RTU communications, alarm handling, data archiving, data publishing and sharing with 3rd party software, reporting and viewing. It's computation engine performs intersite measurement analytics and post processing of reported data for automated QA/QC of measurement and system performance producing user alerts of site or measurement anomalies.

## TELOG CLOUD SOLUTION

If you prefer not to install and manage Telog Enterprise on your corporate network, we offer the Telog Cloud Solution where Telog collects and manages remote Telog RTU data on servers in a certified secure commercial data center operating Telog Enterprise software. Using the Telog Cloud Solution you obtain information and reports from the Telog web service.



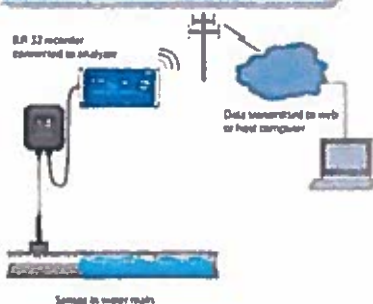


### Hydrant Pressure Monitoring



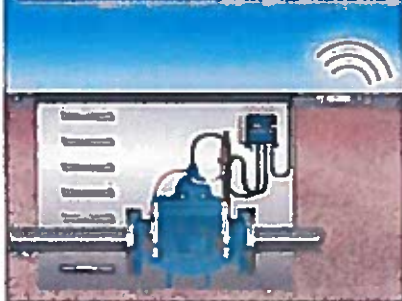
Intended for attachment to common fire hydrants, the Telog HPR-32 monitors system pressures and trends, min, max and average pressure history at any user interval. Data is internally recorded for many months and wirelessly transferred to the user's host computer on a schedule or in response to pressure faults or transients. The ideal product for fire flow testing, customer complaints and hydraulic model calibration.

### Water Quality Monitoring



The Telog iLR-32 Current Loop Recorder can typically be attached to the output of any water quality analyzer used throughout water distribution systems including chlorine residual, pH, turbidity etc. The iLR-32 samples the current loop output frequently (e.g. every second) and reduces this data to meaningful interval data, e.g. 5 minute min/average/max or totals for transfer to your host computer on a schedule or in response to site real-time alarm conditions. Being battery powered, it can be deployed virtually anywhere the analyzer is located.

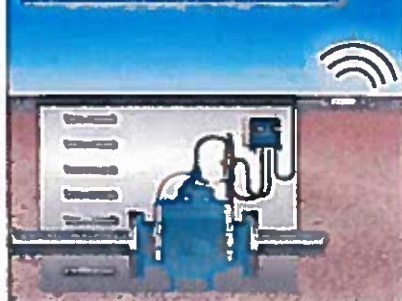
### Pressure Relief Valve Monitoring



The Telog Ru-32 monitors the event switch on a pressure relief valve and also the pressure at the valve providing event history (time stamped to one second resolution) of when, for how long and at what pressure a Pressure Relief Valve operates. You can upload

this information infrequently (e.g. daily) to your host computer or in response to alarm conditions; e.g. pressure trips or valve open duration. The included external antenna can be mounted to the underside of a non-metallic meter box or attached to the top of a metallic meter vault door. Our optional burial antenna can be installed below road or sidewalk surfaces.

### Pressure Reducing Valve



The Telog Ru-32 can be provided with two pressure sensors to monitor the input and output of your pressure reducing valves. Additionally, the Telog Ru-32 can monitor the valve open position if the valve is configured with a valve

position potentiometer (e.g. the CLA VAL x117D). Knowing the differential pressure, the valve position and the valve flow characteristics (provided by the PRV manufacturer) the Telog Ru-32 computes the flow through the valve. This produces a low cost, battery powered wireless recording and real-time alarm system for PRV vault pressure and flow.

### Compound Meter Monitoring



The Telog Ru-32m captures the encoded register reading of single or dual water meters such as master meters and compound meters recording flow totals at user defined intervals, e.g. 5, 15, 30 minutes, etc. And, since the Telog Ru-32m is rated IP-67 submersible, it can be located in underground meter vaults. The external antenna provided with the Telog Ru-32m can be mounted to the underside of a non-metallic meter box or attached to the top of a metallic meter vault door. Telog also offers an optional burial antenna that can be installed below road or sidewalk surfaces.

### Water Hammer Monitoring

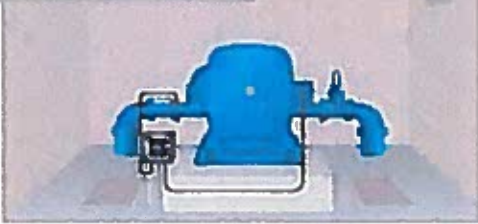


In addition to performing the Telog HPR-32 functions, the Telog HPR-32i Pressure Impulse Recorder captures water hammer and negative pressure event waveforms in a separate memory and wirelessly downloads them to Telog's host computer application. This recorder samples water pressure up to 20 samples/second, storing the waveform of impulse events that are detected by a user defined rate-of-change detector. The recorder only stores the real-time waveform during impulse events so over 200 events lasting from a few seconds to many minutes can be stored. Battery life of the Telog HPR-32i in Impulse Recording mode can exceed 18 months.



# APPLICATION DESCRIPTIONS

## Pump Station Monitoring



The Telog Ru-32 monitors one or two pumps for on/off duration, recording the time stamps of each pump cycle along with sensors for pump input and/or output pressure. The Telog Telog Ru-32 is battery powered and wireless so it can be located virtually anywhere the pumps are located. Telog host software rolls up pump run time over any time period, e.g. daily, weekly, monthly etc. You can choose one of our external antenna options best suited to the size and type of building where the pumps are located.

## Aquifer Level Monitoring



The Telog PR-32 Pressure Recording System is supplied with a submersible level sensor that can monitor the level of underground aquifers to accuracies of 0.1%. You can choose a cable length from 6 feet to 600 feet and depth measurement ranges from 1 foot to 500 feet. Battery life exceeds five years when calling into the host server once per day which significantly minimizes site visit requirements. The Telog PR-32 is small enough to install into a 4" x 7" diameter well-head. The sensor and cable can fit into a 1.5" diameter pipe.

## Tank Level Monitoring



The Telog PR-32 Pressure Recorder provides a monitoring system for water tower level offering two installation approaches. You can drop a submersible level sensor into the tank from above or attach a pressure sensor to a fitting below the tank. Both methods provide an accurate means of determining tank level and Telog software can convert this level to volume if the geometry of the tanks is known. Because this system is both wireless and battery powered, installation is quick and inexpensive.

## Reservoir Level Monitoring



The Telog PR-32 is ideally suited to monitor and report the level of reservoirs or other surface water bodies. Being battery powered and wireless, you can install the recorder virtually anywhere. In most applications, it is only necessary to install a PVC or equivalent pipe to protect the level sensor from debris or surface ice damage.

## Rainfall Monitoring



The Telog RG-32 Rain Gauge Recorder monitors the output of any tipping bucket style rain gauge to provide a record of interval rain totals of any user defined length, e.g. 5 minutes, 15 minutes etc. The Telog RG-32 can be configured to call the host computer on a fixed schedule, e.g. daily, or it can call more frequently when it is raining, for example whenever 0.1 inch of rainfall has been accumulated. This would ensure that the user always knows what total rainfall has occurred up to the most recent 0.1 inch.

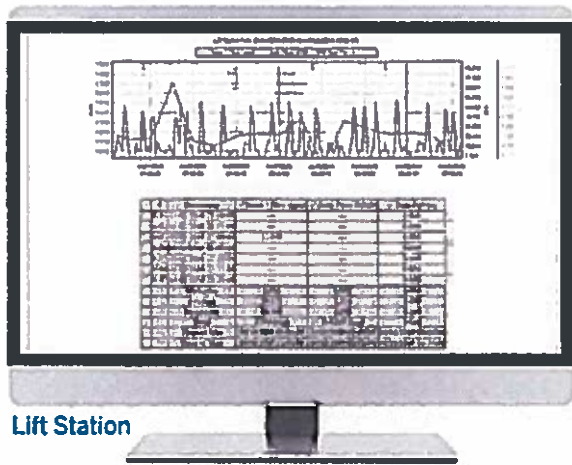
## Mag Meter Monitoring



The Telog Ru-32 attaches directly to the pulse output of magnetic flowmeters (mag meters) to trend flow at user defined intervals, e.g. 5, 15, 30 minutes. Choose the pressure sensor option for a battery powered (up to 5 years) wireless flow/pressure monitoring system. You can program the recorder

with hi and low alarm levels for both pressure and flow for immediate notification of out-of-range site conditions. The included external antenna can be mounted to the underside of a non-metallic meter box or attached to the top of a metallic meter vault door. Our optional burial antenna can be installed below road or sidewalk surfaces.

# SAMPLE DATA VIEWS



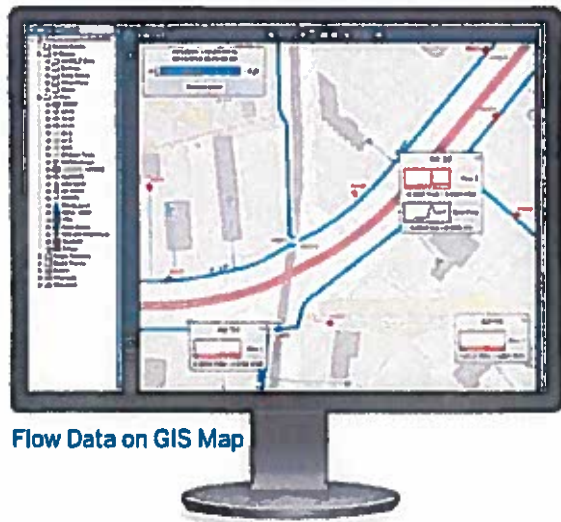
Lift Station



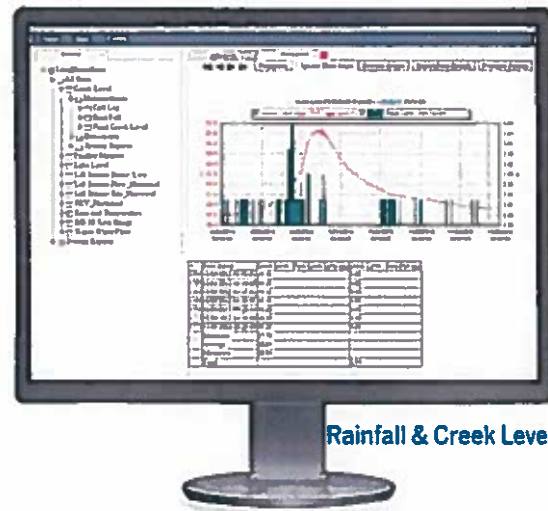
Work Order Creation



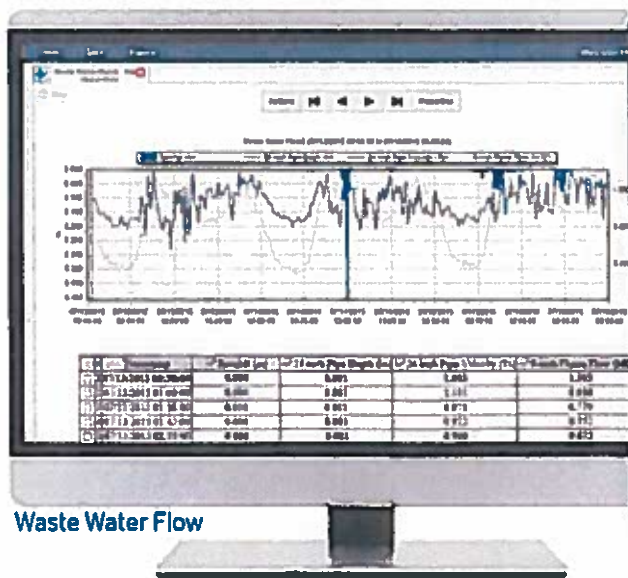
Leak Reporting



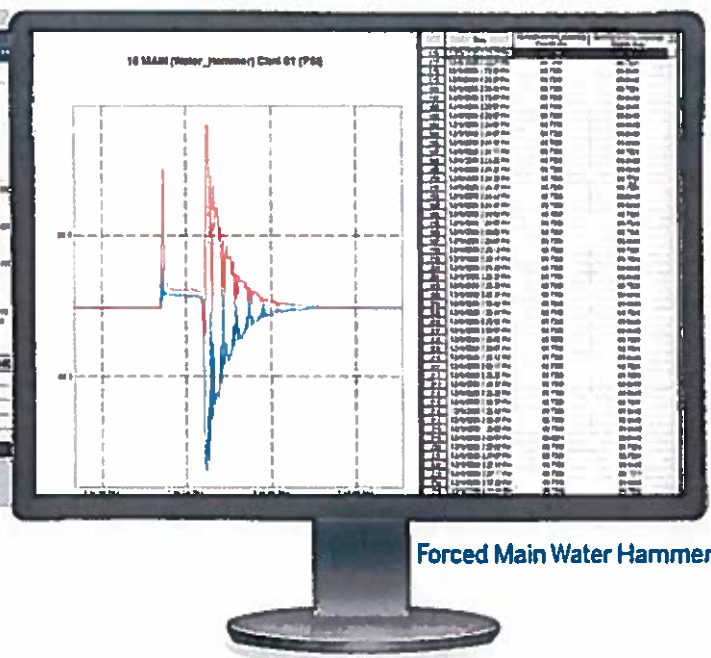
Flow Data on GIS Map



Rainfall & Creek Level



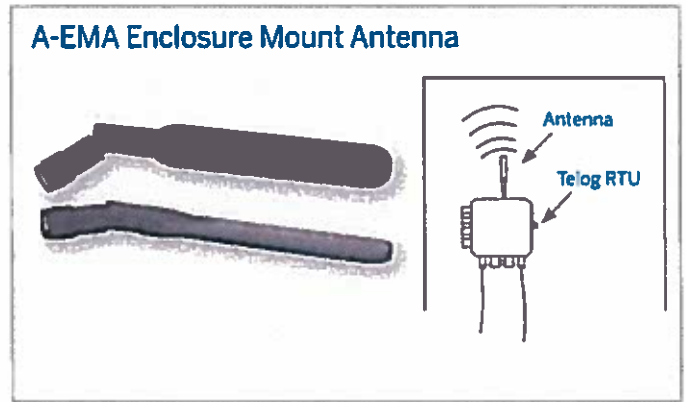
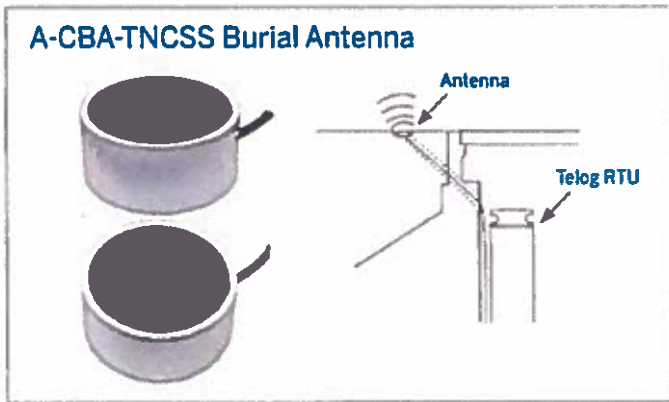
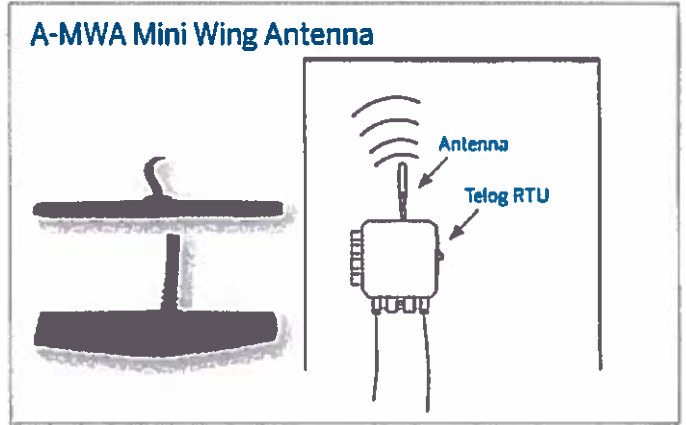
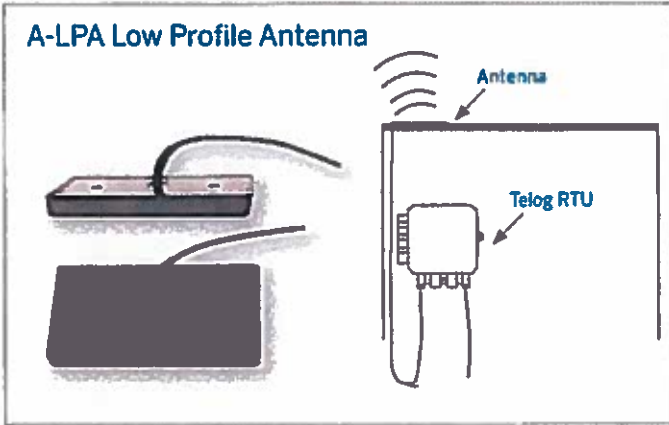
Waste Water Flow



Forced Main Water Hammer



## ANTENNA INSTALLATION OPTIONS

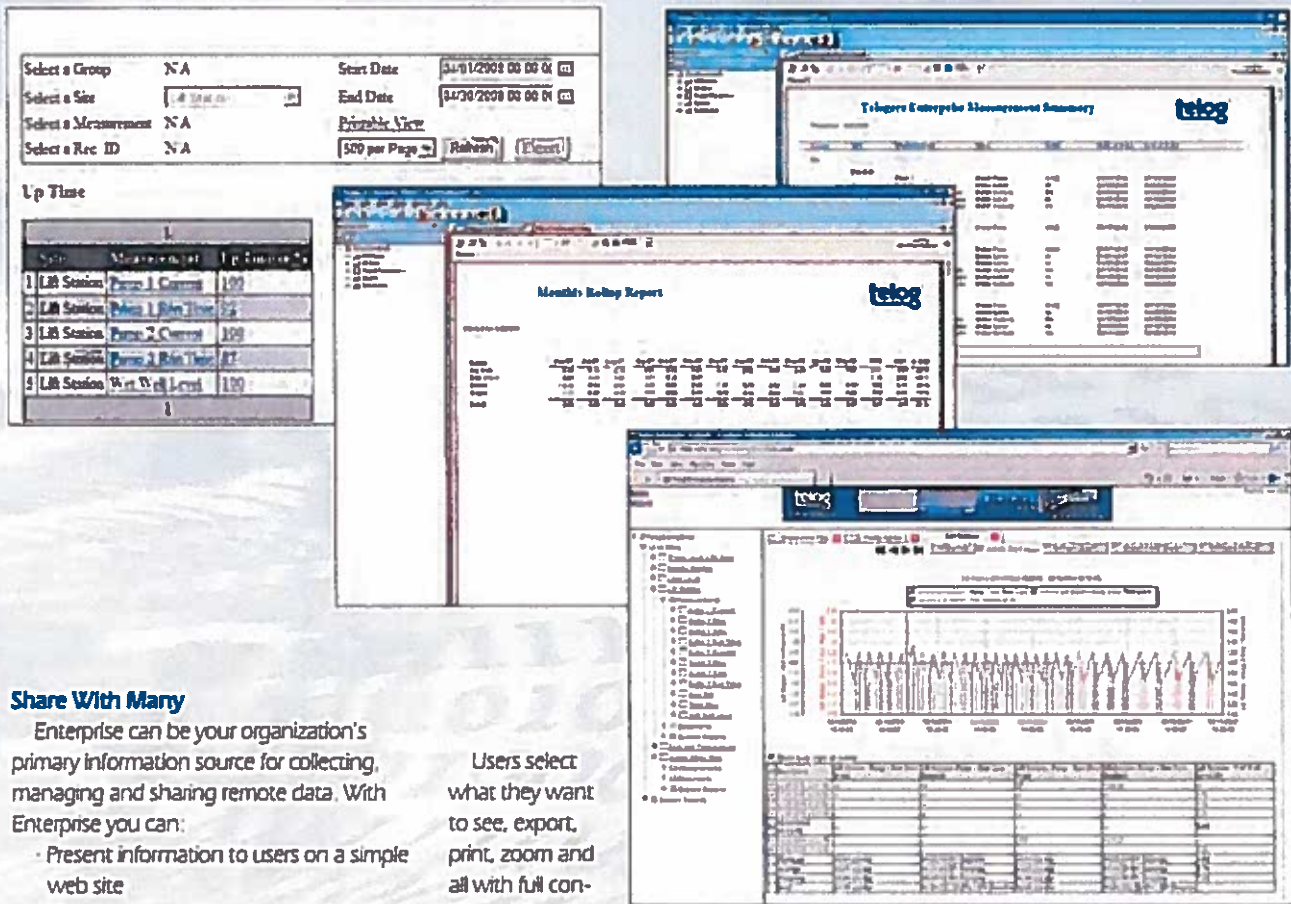


## TELOG 32 SERIES PRODUCT FAMILY



# Data Sharing

## Anytime, From Anywhere



### Share With Many

Enterprise can be your organization's primary information source for collecting, managing and sharing remote data. With Enterprise you can:

- Present information to users on a simple web site
- Generate comprehensive scheduled reports
- Distribute real-time alarms to field crews and system operators

A key feature of Enterprise is the ability to source data to other corporate software applications such as SCADA/HMI, Billing, Modeling, GIS, and Historians that have a need for remotely measured data or alarms.

### Web Site Viewing

Thanks to the Telog Web Module (TWM), up-to-date, accurate information is available for viewing throughout your organization using a computer with Internet access and a common web browser.

You choose the data to be made available for viewing. This way sensitive data or data under analysis will stay protected and safe from viewing. All access to your data is, of course, password protected.

Users select what they want to see, export, print, zoom and all with full confidence that the data displayed on the web carries over the properties stored in Enterprise, so all point correlations are based on correct data.

### SCADA/HMI Compatibility

SCADA plus Enterprise is the ideal partnership for system reliability, scalability, flexibility and cost. Enterprise enhances SCADA functionality at your process plant by including real-time data and alarms from remote sites outside your plant.

A variety of data exchange protocols are supported by Enterprise including SQL queries, OPC, FTP server and others. Because data can be polled by or pushed to your server, the SCADA/HMI system is able to make decisions and report on what is happening on the plant floor as well as your distribution or collection system.

### Model Calibrations

System wide models of your distribution or collection system are critical tools for predicting operations during wet weather events as well as planning system growth. With Enterprise you have an automatic source of information (e.g. site flows, pressures, levels, rainfall), for modeling applications to calibrate with real data and confirm the model's assumptions.

Traditionally, models have been run off-line using historic data. With real time remote data, your models will be run in real time and will provide you with unprecedented information. You will be able to view the effects of a wet weather event on river levels, wastewater collection and storm water systems as weather events occur with real-time forecasting and warnings.