

Mobile Area Water and Sewer System 4725 Moffett Rd Suite A Mobile, AL 36618-2236

PO Box 180249 Mobile, AL 36618-0249

INVITATION FOR BID November 3, 2023

| INVITATION FOR BID NUMBER | IFB 23-050 | |
|--------------------------------|--|--|
| NAME OF BID | Purchase of Telog Data Loggers and Accessories | |
| BIDS WILL BE RECEIVED AT | MAWSS Bid Box Donaghey Business Entrance 4725A Moffett Road or PO Box 180249 Mobile, AL 36618 | |
| BID OPENING DATE | November 10, 2023 | |
| BID CLOSING TIME | 10:30 am Central Time | |
| AWARD WILL BE MADE BY | Total Cost & Lead Time | |
| MATERIAL DELIVERED TO | MAWSS Lift Station Department or Job Site 1610 Shelton Beach Road Ext Mobile, AL 36618 | |
| ADDITIONAL INFORMATION CONTACT | Terry Herman (251) 378-3509 or therman@mawss.com | |
| APPLICABLE SDP POLICY | None | |

Sealed bids must be in the Purchasing Department no later than the time specified in order to be considered. Submissions received after the deadline will not be considered. Envelopes must bear the name of the supplier, company address and the words "**IFB 23-050 Telog Data Loggers**" or "**IFB 23-050 NO QUOTE**." Facsimile or email bids will not be accepted.

All bids must be submitted on the attached forms or your bid will be disqualified. Bidder shall furnish all the information required by the solicitation. The bidder's name must be typed or printed on the bid sheet, and signed by the bidder or appropriate authorized executive officer of the bidder's company. Bidders must initial any changes or erasures. Bidders should retain a copy of bids for their records.

Bidders shall acknowledge receipt of all addenda to this solicitation by signing and returning each addendum or by identifying the addendum number and the date on the bid form. Failure to acknowledge receipt of any addendum by a bidder will result in rejection of the bid if MAWSS determines that the addendum contains information that materially changes the requirements.

All bids shall be quoted FOB Destination, freight prepaid with no additional charges. Unless otherwise specified in the bid, all prices will be on a firm-fixed price basis and are not subject to adjustments based on costs incurred. MAWSS reserves the right to reject any or all bids submitted, to waive any informality in any bid or in the bid process, or to terminate the bid process at any time, if deemed by MAWSS to be in MAWSS's best interest.

A Purchase Order and this "Invitation for Bid" with "Specifications," "Conditions," "Bid Form," signed by the successful bidder's authorized representative, and all attached drawings and other documents furnished by MAWSS to the bidders with the Invitation for Bid in order to illustrate the contract requirements, will constitute a contract for the goods and/or services to be purchased.

lovce Sawyer, Buyer II

Board of Water and Sewer Commisioners

IFB 23-050 TELOG DATA LOGGERS CONDITIONS

The Board of Water and Sewer Commissioners of the City of Mobile will accept bids for **Telog Data Loggers** in our Purchasing Department Bid Box located at 4725 Moffett Road Suite A, Mobile, AL 36618 **no later than 10:30 a.m.** local time on **November 10, 2023**. Award will be by **Total Cost & Lead Time**. The bidder offers and agrees, if this bid is accepted, to furnish the items as defined in the specifications for the unit price set opposite each item. Pricing shall be FOB Mobile, Alabama. All items shall be delivered to our **Lift Station Dept.** located at **1610 Shelton Beach Rd. Ext., Mobile, AL 36618** or to the job site as needed. The bidder shall state the expected length of delivery time on the Bid Form.

Bidder understands and agrees that manufacturer and part numbers are provided for descriptive purposes only. Items of equal or better quality will be considered but must be approved by MAWSS in writing. Upon delivery, if the quality, durability or performance of any product represented as equal or better is determined by MAWSS to be unsatisfactory, MAWSS will require a suitable substitute or will require that the originally specified item be delivered, at the unit price originally offered by bidder. No substitution for items to be provided pursuant to this contract shall be permitted during the contract period without the express written consent of MAWSS. All items provided shall be for commercial use and for the purposes reflected in the contract documents.

No bid on closed out or discontinued item(s) will be accepted. Item(s) that have a determinable shelf life must be disclosed at the time of bid submittal. Bidder understands that his/her bid shall be good and may not be withdrawn for a period of sixty (60) calendar days after the scheduled closing time for receiving bids.

Bidder understands and agrees that quantities will be purchased by MAWSS on an "as needed" basis to replenish inventory. MAWSS shall not be committed to the purchase of a pre-established minimum quantity for any one item.

A bidder may not modify its bid after bid opening. Errors in the extension of unit prices stated in a bid or in multiplication, division, addition or subtraction in a bid may be corrected by the MAWSS Purchasing Buyer prior to award. In such cases, unit prices shall not be changed.

It is the responsibility of the bidder to determine prior to the bid opening whether any amendment, additions, deletions or changes of any type have been made to this Invitation for Bid, Conditions, Specifications, Bid Form or any of the other bid documents. Bid documents and any amendments made to this bid will be posted on our website at <u>www.mawss.com</u>.

Invoices are to be emailed to Accounts Payable at <u>AcctsPayable@mawss.com</u>.

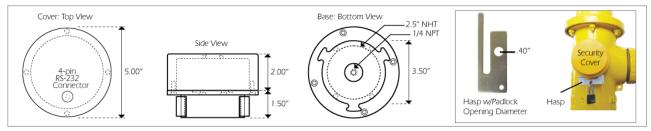
END OF CONDITIONS

IFB 23-050 TELOG DATA LOGGERS SPECIFICATIONS

This is for the purchase of the following Telog data loggers and additional items.

- 1. 5 each Telog HPR-32iA Pressure Data Logger and Impulse Monitoring
 - LTE Cat/1 Verizon
 - Replaceable BP-4 Lithium Battery Pack
 - NHT Hose Mount on a 2.5-inch hydrant hose nozzle outlet
 - -15-200 psi range
- 2. 5 each HPR High Impact Nylon Security Cover, Yellow #A-HSC-Y
- 3. 1 each Communication/Tamper Switch Cable #CU-CTS, 8 Ft Length
- 4. 1 each Support Software: Telogers for Windows Maintenance #S-3PC-MF





END OF SPECIFICATIONS

Strimble water

Telog HPR-32iA WIRELESS, BATTERY-POWERED PRESSURE AND IMPULSE MONITORING

PRESSURE MONITORING WITH TRANSIENT WAVEFORM CAPTURE

The Telog HPR-32iA is an ideal pressure monitoring solution for pressure monitoring, transient analysis, fire flow testing, customer pressure concerns, and hydraulic model calibration. The Telog HPR-32iA recorder measures water pressure at user programmable rates up to 256 samples per second with an internal pressure transducer. The recorder then computes any combination of the minimum, average and maximum values according to your selection of statistics and recording intervals. For example you can measure and store the maximum, minimum and average pressure at 5 minute intervals for more than 90 days (when impulse monitoring is disabled).

The impulse recording option feature of the Telog HPR-32iA units stores the waveform of captured transients. The Telog HPR-32iA can store up to 125 events of variable duration that may occur over many months of on-site monitoring, up to a maximum rate of 256 samples per second and a total of 42,000 data values.

Trimble Unity software combined with Telog wireless hydrant pressure recorders provide a GIS-centric cloud and mobile platform for monitoring system pressures, transients and trends, min, max and average pressure history at any user defined interval. Hydrant pressure recorders can store data internally for many months and wirelessly transmit on a defined schedule and provide alerts and alarms in response to pressure faults or transients, delivering a complete solution for proactive pressure and leakage monitoring and management.



Wireless Communication

The power of every Telog 32 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 HPR-32iA uses a low power, LTE Cat M1 cellular communication modem certified on Verizon Wireless.

Battery Power

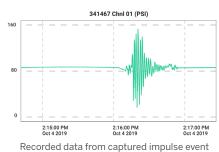
All Trimble Telog hydrant pressure recorders have low power requirements so they can be battery operated. The Telog HPR-32iA series uses a user replaceable BP-4 lithium battery pack. The battery life of a Telog HPR-32iA depends on the sampling resolution chosen in addition to the call schedule (see table below for examples). With user configurable call and sampling rates, you get to choose the best configuration for your application.

Packaging and Installation

Every hydrant pressure recorder from Telog is a low-profile, rugged unit that is easily installed by one person on a standard 2.5 inch hose nozzle outlet. For ease of mind, an optional security cover can be used to prevent vandalism. Once installed, data is immediately available using the range of Trimble software solutions on the cloud or on premise.

Software Support

The Telog HPR-32iA is compatible with all Trimble software applications, including Trimble Unity, Telog Enterprise and Telogers for Windows application software. This ensures that utilities have a complete solution addressing all their remote monitoring needs across their operations, delivered in a manner that suits each individual utility's operations and IT needs.



Applications

- Customer pressure complaint investigation
- Pressure loss testing
- System pressure monitoring
- Water hammer monitoring
- Calibrating hydraulic models
- Fire flow testing
- Hydrant capacity testing
- High speed sampling to 256 samples/ second

Benefits

- Reduce non-revenue water leakage and water main bursts
- Improve customer service and response time
- Monitor and optimize water supply and operations
- Real-time situational awareness on water pressure and supply

Features

- Wireless communication via cellular (LTE)
- Alarm notification
- Time stamped events
- Integral antenna
- 5 year battery life

DATASHEET

Telog HPR-32iA SPECIFICATIONS

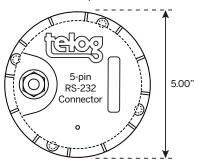
RECORDER MODEL: Telog HPR-32iA

| RECORDER MODEL: Iel | | |
|-----------------------------|--|-------------------------------|
| Туре | Strain gauge, isolated pressure sensor with wireless | |
| Range (psi) | -15 to 200, -15 to 300 (contact Telog for other ranges) | |
| Over Pressure (psi) | 600, 600 | |
| Burst Pressure (psi) | 1000, 1000 | |
| Resolution | 0.025% of full scale, 12-bit | |
| Accuracy | ±0.25% of full scale at constant temperature | |
| Temperature Effect | ±0.015% of full scale per °F | |
| Recording | | |
| Sample Rate | Programmable from 256/sec up to 8 hours | |
| Data Recorded | Selectable min, max and average pressure per interval | |
| Interval Period | Programmable from 1 second to 8 hours | |
| Memory Total | ~82,000 data values (Shared between Impulse and normal data) Note: Normal mode operates as specified above when impulse mod | o io on or off |
| Impulse On Data Recorded | Normal mode interval data plus transient event waveforms | e is on or on. |
| Data Recorded | including pre and post transient event data, user configurable. | |
| Transient Trigger | Pressure rate-of-change; either positive or negative; user configurable. | |
| Impuse Memory | Up to 125 transient events maximum of 41,000 Data Values. | le |
| Impuse Memory | op to 125 transient events maximum of 41,000 Data values. | |
| | after which new data will overwrite oldest data. | |
| Communication | | |
| LocalRS-232 | 5 pin circular connector rated IP67 | |
| | Auto-selected baud rate to 19.2 kbaud | |
| Cellular | Telog Internal Modem certified on LTE Cat M1 for Verizon in USA, | |
| | LTE Cat1 on Sprint in USA. | |
| | HSPA modem certified on Bell in Canada | |
| Local Bluetooth BLE 4.1 | | |
| Bluetooth low energy | max range is 20 feet in open field line of site. | |
| Battery | Factory installed, field replaceable Telog BP-4 | |
| | lithium battery pack | |
| Battery Life | Up to 2800 data calls to host computer | |
| Examples: | 6 years with Daily Data Transfers, 4 Samples per second | |
| | 28 months with Daily Data Transfers, 128 Samples per second | |
| | 14 months with Daily Data Transfers, 256 Samples per second | |
| | (@ very good to excellent signal strength) | |
| Support Software | | |
| S-3PC | Telogers for Windows® 6.51 or later | |
| S-3EP | Telog [®] Enterprise 6.51 or later | |
| TW-UNITY | Trimble Unity | |
| Environmental | | |
| Temperature | 40 °F to 150 °F [4 °C to 66 °C] | |
| Operating Storage | -40 °F to 150 °F [-40 °C to 66 °C] | |
| | w this operating range please contact your | |
| Trimble Telog support team | | |
| Humidity | 0-100% relative humidity | |
| Enclosure | NEMA 4x/IEC IP65 | |
| Size | 5" diameter x 3.5" [127 mm diameter x 89 mm] | |
| Thread* | Hydrant mount: 2.50" NHT standard | |
| (see side view) | Contact Telog for non standard thread | - |
| (· · · · · · · · / | Internal mount: 1/4" NPT | lligh import |
| Security Cover | High impact nylon security cover. Choose from | High impact vandalism. S |
| , | yellow, red or gray to best match hydrant color. | valualism. S yellow, red o |
| | Lockout hasps included. | Jenow, red 0 |
| | | |

Specifications within this brochure are subject to change without notification. This product covered by U.S. Pat. No. 7,219,553 and 7,357,034.

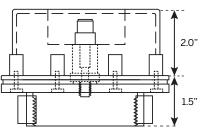
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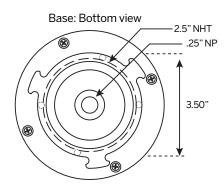




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High impact nylon security cover prevents vandalism. Security cover color options are yellow, red or gray.





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Trimble.

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TELOG (ROCHESTER OFFICE),

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IFB 23-050 TELOG DATA LOGGERS BID SHEET

| QTY | Item | Unit Cost | Ext Cost |
|--|---------------------------------------|-----------|----------|
| 5 each | Telog HPR-32iA Pressure Data Logger | | |
| | and Impulse Monitoring | | |
| 5 each | HPR High Impact Nylon Security Cover, | | |
| | Yellow #A-HSC-Y | | |
| 1 each | Communication/Tamper Switch Cable | | |
| | #CU-CTS, 8 Ft | | |
| 1 each | Support Software: Telogers for | | |
| | Windows Maintenance #S-3PC-MF | | |
| Any additional charges/fees such as shipping | | | |
| Total Cost* | | | |

*Must include all charges.

| Delivery (ARO): (After receipt of order) | |
|---|---|
| Payment Terms | |
| | |
| Company Name | |
| Address | |
| City, State, Zip | |
| Submitted By | Print Title |
| Phone | Email Address |
| | y of perjury that she/he is authorized to sign this document and bind ne all of the terms and conditions of this agreement. |
| Signature | Date |