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 Telog HPR-32iA uses a low power, LTE/Cat 1 cellular communication modem certified on Verizon Wireless

Battery Power

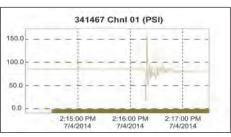
All Trimble Telog hydrant pressure recorders have low power requirements so they can be battery operated. The Telog HPR-32iA series uses a user replaceable BP-4 lithium battery pack. The battery life of a Telog HPR-32iA depends on the sampling resolution chosen in addition to the call schedule (see table 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 Online (cloud), 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.



Recorded data from captured impulse event

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
- Certified to NSF/ANSI 61 and 372

Features

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



Telog HPR-32iA SPECIFICATIONS

RECORDER MODEL: Telog HPR-32iA

Strain gauge, isolated pressure sensor with wireless Type

Range (psi) -15 to 200, -15 to 300 (contact Telog for other ranges)

Over Pressure (psi) 600, 600 Burst Pressure (psi) 1000 1000

0.025% of full scale, 12-bit Resolution

±0.25% of full scale at constant temperature Accuracy

Temperature Effect ±0.015% of full scale per °F

Recording

Programmable from 256/sec up to 8 hours Sample Rate

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)

Impulse On Note: Normal mode operates as specified above when impulse mode is on or off.

Data Recorded Normal mode interval data plus transient event waveforms 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.

after which new data will overwrite oldest data.

Communication

Local RS-232 5 pin circular connector rated IP67

Auto-selected baud rate to 19.2 kbaud

Cellular Internal Telog WM2/L1 cellular modem LTE Category 1

certified Verizon Wireless

Local Bluetooth BLF 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: 5 years with Daily Data Transfers, 4 Samples per second (HPR-32A and HPR-32Ai)

2 years with Daily Data Transfers, 128 Samples per second (HPR-32Ai) 1 year with Daily Data Transfers, 256 Samples per second (HPR-32Ai)

(@ 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

DHS-Service Telog Online TW-UNITY Trimble Unity

Environmental

Temperature 40° to 150°F [4° to 66°C] Operating Storage -40° to 150°F [-40° to 66°C]

Note: For applications below this operating range please contact your

Trimble Telog support team.

Humidity 0-100% relative humidity Enclosure NEMA 4x/IEC IP65

5" diameter x 3.5" [127mm diameter x 89mm] Size Hydrant mount: 2.50" NHT standard Thread* (see side view) Contact Telog for non standard thread

Internal mount: 1/4" NPT

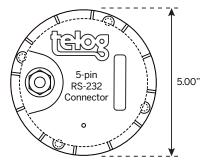
Security Cover High impact nylon security cover. Choose from

yellow, red or gray to best match hydrant color.

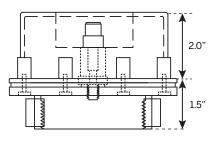
Lockout hasps included.

Certified to NSF/ANSI 61 and 372

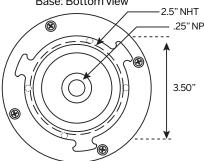
Cover: Top view



Side view



Base: Bottom view



















 $Windows @ is a registered trademark of Microsoft Corporation. Verizon Wireless ^{\texttt{TM}} is a trade-part of the second s$ mark of Verizon Trademark Services.

Specifications within this brochure are subject to change without notification. (11/2018)

U.S.A: TRIMBLE NAVIGATION LIMITED

3501 Jamboree Road Irvine, California 92660 +1 (949) 892-6120

TELOG (ROCHESTER OFFICE), NEW YORK, USA

830 Canning Parkway Victor, New York 14564 +1888-835-6437

R.O.W: TRIMBLE NAVIGATION LIMITED NSC Campus, Mahon,

Cork Ireland +353 21 230 9328 TrimbleWater_ContactUs@trimble.com www.trimblewater.com



