Stilltek iGage Stream Gauge



The iGage is an innovative low-cost water level gauge that is easily deployed on bridges and other structure to measure water levels. It provides real-time data through the Iridium satellite network. The Iridium network provides global 24/7 coverage throughout the world.

Having real-time data can be critical for monitoring, predicting and issuing warnings to the public for river, coastal as well as inland flooding.

The iGage is completely self-contained powered by a battery with solar panel charging which allows it to be deployed in remote areas without power or communication.

The small enclosure makes it easily deployable wherever there is a bridge or other structures over the water.

The iGage was developed under a Cooperative Research and Development Agreement with National Weather Service Alaska River Forecast Center a unit of NOAA.

- Measures distance to water using a time-of-flight acoustic sensor up to 32.8 ft (10 meters).
- No external wiring required, completely self-contained.
- Small form factor 7 x 5 x 3 in (9 x 5 x 3 in including sensors)
- No Infrastructure required
- Battery powered with solar charging provides continuous operation 24/7.
- Global communication coverage through the Iridium satellite network. Works anywhere on the globe.
- Real-time reporting.
- Real-time clock maintains time synchronized with satellite network.
- Compact size makes iGage easily deployed on bridge or other structures.



IGage INNOVATION

Small form factor Lightweight Low cost Solar powered Self-contained No infrastructure required. Global coverage Easy Deployment

iGage OPTIONS:

Rain gauge

The iGage can be equipped with a tipping bucket rain gauge to measure precipitation as well as water levels.

GPS module

Equipped with a GPS, the iGage will report its precise location useful for portable operations.

Snow Gauge

The iGage can be configured with a snow sensor for use as an automated snow stake.

AIRTIME & DATA COST:

The iGage uses a binary compressed data format to minimize airtime data costs. A typical deployment, reporting stream level once per hour cost approximately \$13.50 per month.

REMOTE CONFIGURATION:

The iGage measurement and communication intervals can be configured and adjusted remotely after deployment through the 2-way SBD satellite link.

Stillwater Technologies

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TECHNICAL SUPPORT

We pride ourselves in providing excellent customer service. We believe our success is totally dependent on our customer's experience and success of their mission.

DATA DELIVERY

Upon deployment, data is immediately available through our web site. Our data service provides an API to integrate data into your infrastructure or website. We support multiple data formats including html, json, csv, xml and shef.

TURNKEY SOLUTION

The iGage provides a turnkey solution for water level monitoring without requiring infrastructure. They may be deployed on a permanent or temporary or portable basis.

FURTHER INFO

For more information on any of our products or services please visit us on the Web at: Installation and Deployment



The small size and weight of the iGage makes deploying a new iGage very straight forward process. On the left is a typical bridge deployment using commercial off the shelf parts commonly available at retail and wholesale providers.

The weight of the iGage at 3.50 lbs. does not require heavy duty hardware and can easily be mounted on electrical conduit using stainless steel hose clamps.

The two requirements for reliable operation are to provide clear sky to sunlight for charging as well as a clear view of the sky for satellite communication.

Bridge mounting inevitably requires some compromise as the bridge may obscure satellite coverage

iGage Specifications

Distance Measurement: Distance Accuracy: Distance Resolution: Size: Weight:

Power Battery: Solar: Avg Current: Communication: 0-32.8ft (0-10m) 1% of distance measured +/- 1 mm (.04in) 7in x 5in x 3in 3.50lb

6VDC (4.5Ah) 9VDC (1 Watt) < 2ma w/ hourly transmission Iridium Short Burst Data two-way transceiver

SERVICES AVAILABLE

Installation and Setup Maintenance Application Support Hardware Support Extended Warranty

Warranty:

Data Format:

90-day warranty. Extended warranty available for purchase

json, html table, csv,

xml, shef

Other: Real Time Clock 1024 Kbit Non-volatile storage (~2yr data logging) On board and outside air temperature sensor



31015 NE 104th Street Carnation, WA 98014 Phone 206.350.0955 e-mail: sales@stilltek.com