iLevel-GW

IP Groundwater Logger / IP Tube Logger

Groundwater | Surface Water | Water Level | Water Quality

General Description

iLevel-GW is an IP data logger designed for **very low power** data acquisition of **level and temperature** in groundwater and surface waters. The system can be easily expanded into a multi-channel monitoring device by adding optional sensors for water quality monitoring. By default, an iLevel-GW comes with a coupled water level and water temperature sensor. The vented pressure sensors auto-compensate for atmospheric pressure and temperature variations providing a corrected reading at all times.

The iLevel-GW is a **low-power** and **durable** device (made from stainless steel and ABS) operating unattended for very long periods on batteries. It is equipped with highly precise yet robust **high-tech electronics**. Its dimensions are optimized for insertion into standard 2" boreholes (adapters for larger boreholes and mounting clamps available). The iLevel-GW is equipped with a battery-operated autonomous IP data logger. The integrated data modem reports to the KISTERSdatasphere application.

Operation

The iLevel-GW is equipped with a mobile radio modem (4G LTE-M/2G).

The device is **perfectly suitable for battery operation**: Low power components, innovative firmware, hibernation between samples and data transmissions, and the efficient M2M data protocol all contribute to saving battery power. The iLevel-GW

monitors battery, storage, transfers, internal temperature and humidity, and signal strength to enable remote diagnostics. For preventive maintenance, these self-diagnostic parameters can trigger alarm SMS or emails.

Applications

– Groundwater Monitoring: Rest Water Level (RWL), Pumped Water Level (PWL)
– Surface Water Monitoring: Level and Quality (optional)
– Water Quality Monitoring

Features

– Stainless steel enclosure
– Long-term maintenance-free operation
– Data security: data access via PIN only
– Local and remote configuration
– Local and remote data downloading
– Bi-directional data transfer, no data losses

KISTERS

Technical Specifications Data Logger

Input Channels	24 channels, high-resolution
Communications	– Remote: 4G LTE-M / 2G, bi-directional – Local: Bluetooth communication
Power Supply	Lithium batteries 3.6 V (up to 10 years of operation or up to 20.000 internet transfers and 200.000 data logs per unit)
Data Storage	– Internal memory for up to 250 k measurement entries, non-volatile – Storage cycle: freely-definable, minimum 10 secs
Material and Environmental Conditions	– Enclosure: stainless steel, ABS – Operating temperature range: Modem -30 °C to +85 °C (-22 °F to 185 °F), Logger -40 °C to +85 °C (-40 °F to 185 °F)
Dimensions: Diameter Ø, Length, Mass	48.5 mm Ø, 411.5 mm length, 1,5 kg (1.78" Ø, 16" L, 3.3 lbs) (without sensor)
Conformity/Compliance	CE

Technical Specifications Sensor (standard) Suitable sensors can be connected via SDI-12 depending on the application.

Measuring Range	– Pressure: 0 to 10 mH2O (overload 3 bar); measuring ranges up to 100 m available – Temperature: -25 °C to 85 °C (-13 °F to 185 °F)
Accuracy	– Pressure: 0.1 % FS; – Water temperature: 0.3 °C
Material	– Sensor: stainless steel 316 L / 1.4435 (titanium (GR. 2) optional) – Seals: viton (EPDM or Kalrez optional) – Cable: PUR (standard), PE (drinking water) or FEP (chemical resistant, Teflon impregnated)
Dimensions: Diameter Ø, Length, Mass	Typically 24 mm Ø, 157 mm length, 200 g (0.95" Ø, 6.1" L, 0.44 lbs) (without cable)
Conformity/Compliance	CE

Accessories

datasphere

Software: Data transmission to cloud-hosted KISTERSdatasphere application for viewing and more:

– Viewer: visualize and download station data, measured data, multiple parameters, multiple stations/loggers
– Optional: manual validation, alarming, web-based API

Pipe End Caps: To avoid insertion of debris, optionally with integrated GSM antenna, hexagonal nut, aluminum, weather-proof, frost-proof, corrosion-proof, various models and sizes

GPRS/GSM-Antenna: Proper antenna for your application and site-specifics (available on demand)

Mounting Accessories:

– Stainless steel protective cage for pressure sensors, protects the sensor underwater from animals, debris, turbulences, etc. (mounting bracket optional)
– Stainless steel protective tube (galvanized, different sizes): protects data loggers and cabling, suitable also for installation of logger in water streams
– 2" pipe clamp for wall-mounting of data loggers
– Cable clamp to attach loose cables

Please ask for details.

Reseller

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