IP Groundwater Logger / IP Tube Logger

Groundwater | Surface Water | Water Level | Water Quality



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 bat- tery 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









Technical Specifications Data Logger	
Input Channels	24 channels, high-resolution
Communications	Remote: 4G LTE-M / 2G, bi-directionalLocal: 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

K 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)





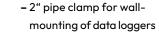
 Stainless steel protective cage for pressure sensors, protects the sensor underwater from animals, debris,



bracket optional)
Stainless steel protective
tube (galvanized, different
sizes): protects data

turbulences, etc. (mounting

suitable also for installation of logger in water streams



loggers and cabling,

– Cable clamp to attach loose cables



KISTERS Australia | sales@kisters.com.au | kisters.com.au | KISTERS Europe | hydromet.sales@kisters.eu | kisters.eu | KISTERS New Zealand | sales@kisters.co.nz | kisters.co.nz | KISTERS North America | kna@kisters.net | kisters.net

