⫻ iLevel-GW Mini

IP-capable Groundwater Logger

Groundwater | Surface Water | Water Level | Water Quality

General Description

iLevel-GW Mini 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 Mini comes with a coupled water level and water temperature sensor **accurate to 0.1 % FS**. The vented pressure sensors auto-compensate for atmospheric pressure and temperature variations providing a corrected reading at all times.

The iLevel-GW Mini is a **low-power** and **durable** device (made from stainless steel and ABS) operating unattended for very long periods on battery. 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 Mini is equipped with a battery-operated autonomous IP data logger. The integrated data modem reports to the KISTERSdatasphere application.

Operation
The iLevel-GW Mini is equipped with a 4G LTE-M modem.

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 Mini 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
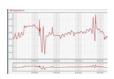– Bi-directional data transfer, no data losses

⫻ KISTERS

Technical Specifications Data Logger

Input Channels	5 channels, high-resolution
Communications	– Remote: 4G LTE-M modem – Local: Bluetooth 5.0 BIE
Power Supply	Lithium battery 3.6 V (up to 10 years of operation or up to 10.000 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 2 sec
Material and Environmental Conditions	– Enclosure: stainless steel, ABS – Operating temperature range: Modem -30 °C to +85 °C, Logger -40 °C to +85 °C
Dimensions: Diameter Ø, Length, Mass	48.5 mm Ø, 305 mm length, 1.2 kg (without sensor)
Conformity/Compliance	CE

Sample Specifications of a suitable Sensor *

Measuring Range	– Temperature: -25 °C to 85 °C with accuracy <= +/- 0.3 °C – Pressure: 0 - 10 mH2O with max. load 3 bar (further options on demand)
Resolution	Pressure 0.01 % FS; Water Temperature 0.05 °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 (without cable)
Conformity/Compliance	CE

* Other sensors available on demand.

Accessories

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 under-water 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

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

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