

## Package contents

1x iLevel-GW Tube Datalogger  
 FAT document incl. access PIN for Bluetooth com.  
 Quick Installation Guide  
 Optional:  
 Sensors and other accessories as ordered  
 Antenna/Batteries/SIM card

## Specifications summary

The technical specifications are only binding unless otherwise agreed.

### Type:

IP Tube Data Logger

### Input channels:

SDI-12, 24 channels, high-resolution

### Communications:

4G LTE-M, bi-directional

FTP file transfer

### Power Supply:

2 × lithium batteries 3.6 V, 13,500 mAh non-rechargeable.

### Data Storage:

Internal memory for up to 250k of measurements, non-volatile  
 User-definable log rate  $\geq 2$  s

### Material:

V4A steel casing pipes

### Dimensions:

48.5 mm Ø, 411.5 mm length, 1.5 kg (no sensor)

### Operating Temp. Range:

-30 °C ... +85 °C

### Signal Connector:

screw-connectors

### Rating:

IP68

### Compliance:

CE, RoHS

## Main parts



- 1 iLevel-GW Tube Datalogger
- 2 Joint between sensor and electronics department
- 3 Removable bottom cap with cable glands
- 4 Sensor connection cabinet
- 5 Removable top cap protecting antenna connection and providing anker ring for 2" tube mounting
- 6 SIM card compartment
- 7 Battery compartment
- 8 Antenna FME connector

The housing consists of two V4A steel casing pipes with a plastic fitting inside. Keep the joints and gaskets clean and undamaged. Before assembly, inspect and lubricate the joints and gaskets with silicone or O-ring grease. To maintain a watertight seal, lubricate the joints each time the datalogger body is opened and closed (changing batteries, inserting SIM card, etc.).

## Mounting Instructions

For installation in a 2" tube, place the data logger top cap (5) on the tube edge. For 3" or 4" tubes, use an adapter ring with an opening for light plummet.

For hydrographic applications, the measurements should be compared with a light plummet after installation.

### Moisture Control/Dessicant:

iLevel-GW comes with silica-gel desiccant packs in the main compartment. Replace these packs in humid conditions. The logger's self-monitoring data indicates rising moisture, prompting desiccant replacement.

### Positioning:

Upright with the sensor connector cabinet pointing down.

Recommended: Installation inside 2" metal tube – device out of sight, well protected, less sensitive to external force.

### Antenna:

The device has a standard FME plug. Connect the antenna fully and adjust its position slightly for a better signal. Use high power antennas (check local regulations) or directional antennas for areas with weak signals. The antennas are mounted according to the location: underfloor antennas are clamped between the frame and cover, while helical antennas are installed onto the cover for above-floor locations.

### Fitting the SIM Card:

Open the tube logger's body (the top cap (5) works like a ring nut) to fit the SIM card. Press the drawer marked "Push Open" to release or lock it.

## Power supply



Possible battery types include 2 Lithium Mono D cells at 3.6V DC.

**Only high current batteries are suitable for data transmission. A suitable battery is the Saft LSH 20, commonly available from electronics suppliers.**

**Caution:** Use appropriate batteries to prevent damage. Batteries are field-replaceable. To replace, remove the steel housing by unscrewing the lower cap (3) (acts as a ring nut) and pulling off the tube. Observe polarity as incorrect insertion may blow the fuse (requiring factory repair) or damage the electronics.

The device has a backup capacitor to handle brief power outages during battery changes without losing data. If the outage is too long, the device reboots (indicated by the green LED flashing 10 times), and time synchronization is needed.

## ⚠ Safety instructions

- 1 Installation Guide:** Read the installation guide before installing the iLevel-GW.
- 2 Support:** Contact the manufacturer or reseller if you have trouble understanding the IG.
- 3 Intended use:** iLevel-GW is a hydrographic or environmental datalogger.
- 4 Safety:** Do not install in hazardous or explosive areas.
- 5 Warranty:** Modifications void the warranty.
- 6 Standards:** Follow electrical safety standards.
- 7 Regulations:** Comply with health, safety and environment regulations.
- 8 Water safety:** Provide and ensure the use of life jackets or buoyancy aids for workers at risk of falling into water during installation or maintenance near water bodies. Life jacket should be thoroughly checked by the user prior to use.

For detailed safety instructions, please refer to the user manual available for download from the product website:



## Configuration Software

HyComm is the KISTERS software used for local communication between a computer or portable device and the iLevel-GW Tube Datalogger. With HyComm it is possible to configure the parameters of the logger and display the measured values directly.

### To connect:

- 1** Turn on Bluetooth® on your computer/portable device.
- 2** Launch the HyComm software.
- 3** Select Bluetooth® connection and select the iLevel-GW from a list of devices found.
- 4** HyComm will pair with the iLevel-GW.
- 5** Enter the Bluetooth®-PIN. See the accompanying FAT sheet for the PIN.
- 6** Once the PIN has been entered correctly, a Bluetooth connection is automatically established between the data logger and your PC or laptop. You can now access the data and make settings on the logger.

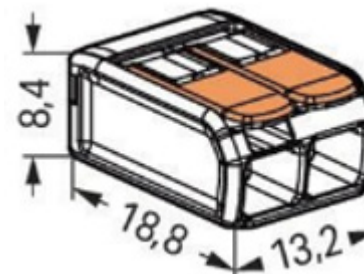


## Pinout – connector compartment

### SDI-12-iLevel-GW

| Pin # | Cable colour | Signal            |
|-------|--------------|-------------------|
|       | White        | SDI-12 - 12V, out |
|       | Yellow       | SDI-12 - GND      |
|       | Green        | SDI-12 DATA       |

### Wago Splicing Connectors w/levers



- No external connection or termination.
- Sensors are connected internally – open the bottom of the sensor housing to access the connection slicing connector terminals with levers.
- Check the table above for cable colour.
- 3-wire connection
- Cables must be inserted through the cable gland at the bottom of the unit.

### WARNING:

Cable glands and sensor housing must be properly closed and secured to ensure protection against moisture.