

LEVEL TRANSMITTER

Level transmitter for liquid media



Applications

Groundwater - River - Wastewater - Sea - Fish breeding - Coolant water

Level Transmitter for Groundwater Measurement

Optimize your processes

- ✓ Everything from a single source
- ✓ Always and everywhere informed
- ✓ Integrated solution
- ✓ Real-time alerts
- ✓ Robust & Long-lasting
- ✓ Cloud-Platform

Technical Specifications

For continuous level measurement of liquids, CPK Automotive offers a level sensor. It is designed for the measurement, recording, visualization and transmission of water levels at remote locations via the Internet. Level profiles of lakes, rivers or groundwater measuring points can be created and analyzed.

The proven hydrostatic pressure measurement enables reliable monitoring of the water level independent of water properties and tank geometry.

The level sensor is characterized by high measured value resolution and accuracy. It is extremely robust and durable and thanks to very low power consumption, provides reliable measured values over several years.



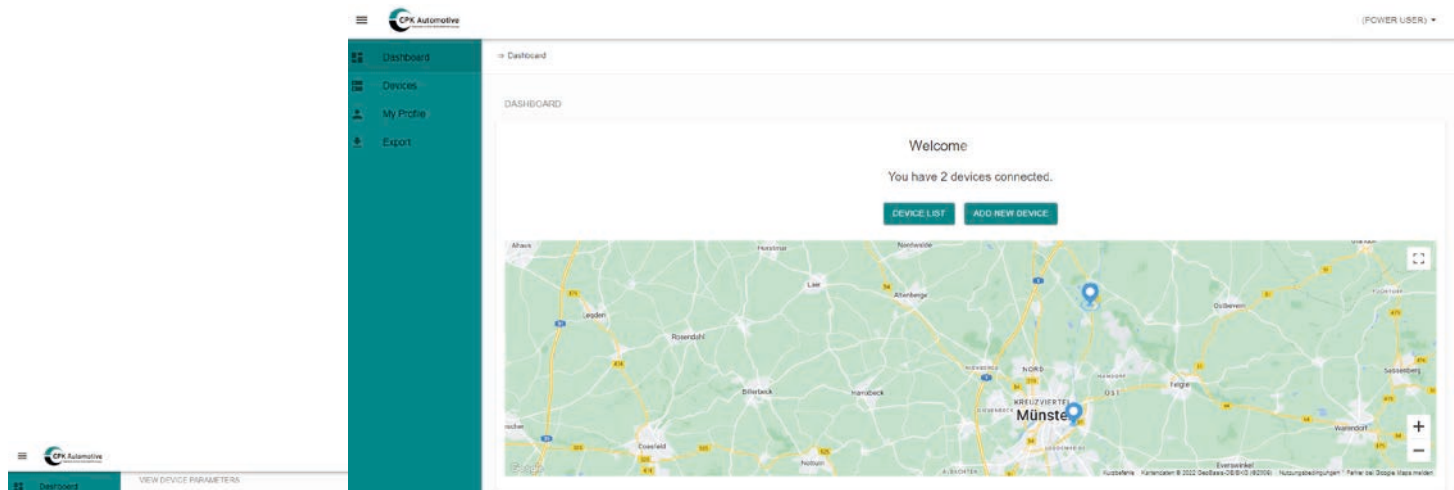
A Longlife battery is integrated in the level housing, ensuring maintenance-free operation for several years.

The measured values with date and time are transmitted to a cloud at an interval that can be set by the user. The continuous data transmission takes place via NB-IoT. The data can be conveniently retrieved online at any time. If limit values are exceeded, the alarm management informs the user via SMS or e-mail.

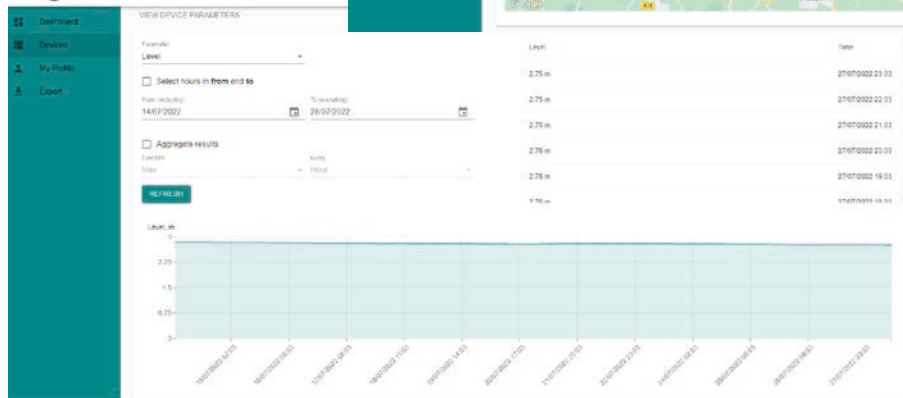


The structure and design of the cloud platform makes it easy for users to access the measured data.

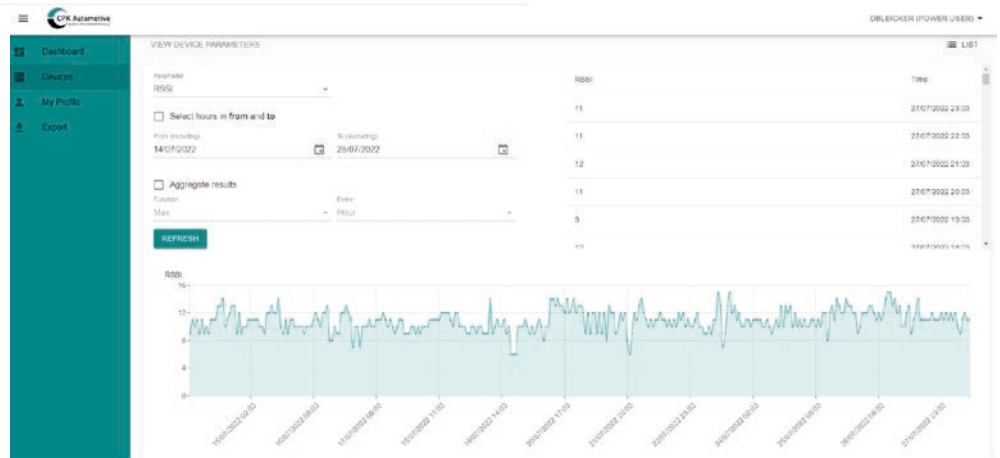
Alerts and alarms can be configured individually and reports can be generated via report functions.



Device Overview



Level



RSSI

Highlights

- Measuring range pressure up to 200 m water column (0 to 20 bar)
- Real-time remote data transmission to a cloud platform
- Online status monitor (liquid level, battery level, signal strength)
- Very long battery lifetime up to 10 years with daily transmission
- Alarm in case of limit violation, notification via e-mail or SMS
- Easy installation
- Water resistance with IP68 protection class (internal Antenna)
- Operating temperature -20°C bis +80°C



Technical Data

Sensor

Dimensions	approx. 110 x 26,5 mm (l x d)
Material:	Stainless steel 304
Range	2, 5, 10 or other ranges up to 200 m H ₂ O
Accuracy	+/- 0,25 %
Operation temperature	-20 ...+85 °C

Measuring Unit

Dimensions	approx. 155 x 56 mm (l x d)
Material:	POM

Power

Power Supply	3,6 V Lithium Battery (replaceable), External Power (option)
Battery Lifetime	50.000+ Readings and 10.000+ Transmissions (more than 10 years for most applications)
Power Consumption	Power Saving <5 mA Transmission <220 mA

Connectivity

Communication Standard	Narrowband IoT
SIM Card	4FF Nano-SIM
Firmware Update	Over The Air
Sampling Period	Configurable via Cloud (default 4 h)
Antenna	Internal (Standard), External (customised options available)

Various

Weight	approx. 1,3 kg (for 5 m range)
EMC Standard	ETSI EN 301 489-1 V2.2.3 (2019-11) ETSI EN 301 489-17 V3.2.4 (2020-09) ETSI EN 301 489-19 V2.1.1 (2019-04) Draft ETSI EN 301 489-52 V1.1.2 (2020-12)
Radio Certification	RED 2014/53/EU

