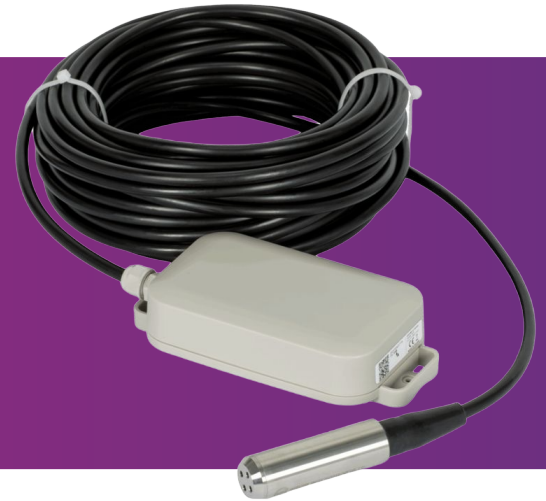




## NB-IoT

# Water level logger

The Efento NB-IoT wireless data logger is a device designed for continuous water level monitoring in applications requiring reliable data transmission and high measurement accuracy. Communication takes place directly via the Narrowband IoT (NB-IoT) cellular network, without the need for additional gateways, routers, or other local infrastructure.



## Key Features

- **Easy installation** – thanks to NB-IoT connectivity, installation of the data logger is limited to mounting it on a wall or placing on the shelf. There is no need to install additional gateways or configure a Wi-Fi network.
- **Quick setup** – the built-in Bluetooth Low Energy (BLE) module and dedicated mobile application allow the device to be configured and activated in less than 15 minutes.
- **Up to 8 years of battery life** – the device is designed for long-term, maintenance-free operation. Thanks to local data analysis and optimized transmission, it can operate for up to 8 years without battery replacement.
- **Cloud platform integration** – the data logger works with the Efento Cloud platform, enabling the collection and analysis of measurement data as well as sending alerts in case of irregularities. Support for standard communication protocols also allows integration with any server-based system.
- **Remote updates and configuration** – enables remote firmware updates and secure modification of device settings.

## Zastosowanie

The device is designed for measuring water level using an external 15-meter hydrostatic probe. The sensor is used in wells, water tanks, retention systems, water supply installations, wastewater treatment plants, and environmental monitoring. It can be used for groundwater level monitoring, water resource management, and supervision of industrial installations.

## Sensors

Water level	
Model	Hefei WNK 8010, 15-meter probe
Measurement range	0-15 m
Accuracy	0,5% FS
Resolution	Default 1 mm (user-configurable)
Drift	0,2% FS/ year
Protection class	IP68

## Technical data

Data logging	
Memory size	100 000 measurements
Measurement interval	5 s - 7 days (user-configurable)

Bluetooth interface	
Radio module frequency	2.4 GHz
Power	2.5 mW (4 dBm)
Range	Up to 100 m (LOS)
Transmission period	1 s
Bluetooth version	Bluetooth Low Energy (4.0)

NB-IoT interface	
NB-IoT bands	1, 2, 3, 4, 5, 8, 12, 13, 17, 18, 19, 20, 25, 26, 28, 66, 70, 71, 85
3GPP	13 i 14 (LTE Cat NB2)
Power	23 dBm ±2 dB

Communication	
Protocol	CoAP
Transmission interval	1 min - 7 days (user-configurable)

Operating and Storage Conditions	
Main unit operating conditions	Temperature: -15° to 70°C, humidity: 0 to 99% (non-condensing)
Probe operating conditions	Temperature: -40° to 85°C
Storage conditions	Temperature: -15° to 70°C

Certifications	
Regulatory	CE (RED), FCC
Environmental	RoHS

## Variants

EAN	Power Supply	Enclosure	Weight
5905309603943	8,500 mAh battery (replaceable). Battery life up to 8 years	White ABS plastic, IP30 Dimensions: 26 × 62 × 124 mm	1065g (with battery)
5905309604261	5V, USB-C, with a 1,300 mAh rechargeable backup battery to maintain operation in case of power loss	White ABS plastic, IP30 Dimensions: 26 × 62 × 124 mm	1050g