

# ULTRA LOW POWER INDUSTRIAL IOT AMR DATA COLLECTION DEVICE



New LPWA communication technologies, LORA; NB IoT, and local Bluetooth 4 connection



The DW 256 ULX product family is basically a group of tools for collection and remote transmission of impulse-based data from metering devices (water, gas, electricity).

The device processes the signals of gas consumption metering devices (plate-shaped, diaphragm, rotary, turbine meters), water meters, electricity meters and digital sensors. The device has its own power supply, which ensures high degree of autonomy and up to 10 years of maintenance-free operation.

The device automatically reads the consumption data from the field metering devices, stores them in a local memory and then forwards the data to the central database via LPWA (LoRA, NB-IoT) communication channels.

The device is an ultra-low-power modular architecture in accordance with Industry 4.0 and industrial IoT standards, with a compact high-energy Li battery.

# MAIN CHARACTERISTICS

- LPWA communication
- NB IoT and LoRAWAN
- Bluetooth 4LE/LR
- Up to 10 years of battery life
- Available in IP68 design
- Cable sabotage detection
- Impulse and RS485 input
- Also available with ATEX cert.
- Quick and efficient installation
- Automatic data collection
- Remote (over-the-air) configuration

### **FEATURES**

- RS485 serial communication port for connection of a pressure transmitter
- 2 impulse inputs for connecting meters
- Tamper/sabotage detection
- High capacity internal memory
- 1+1+10 years battery life (factory warehouse + customer warehouse + operation time)
- BLE mobile installation software
- Parameterizing software
- Internal and external antenna connection option



# WHERE TO USE?

Mainly, at endpoints of public utility distribution networks, providing a cost-effective and long-term solution for public utility meter reading and remote data transmission.

The device provides an optimal solution for reading data from measuring instruments in locations where electric power supply is not available.

### **OPERATION**

The impulses given by the meters are proportional to the consumption. The measured consumption, generated by the summation of the pulses, is sent to the central database in predefined intervals. The data is stored in the field device.

The device can also receive impulse signals from public utility consumption measuring devices (plate-shaped, diaphragm, rotary, turbine).

Data acquisition is also available from digital pressure transmitters, via RS 485 serial interface.

Stored data can be read out on the field through local Bluetooth connection, without opening the cover of the device.

# **DESIGN**

The unit is available with both, explosion-proof design and IP68 protection, also can be installed both inside and outside. Typical application: outdoors, near the meter, wall-mounted or installed in a water meter pit.

There is wired connection between the meters and transmitter gauges and the communication device.

### INSTALLATION

The equipment can be easily set up with proper training.

Meter synchronization, k-factor setting, on-site instrument diagnostics can be done with the help of a Bluetooth mobile application.

Before commissioning, parameterizing application can be used to set communication parameters.

The device sends the data to the central application based on the previously set communication frequency.

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