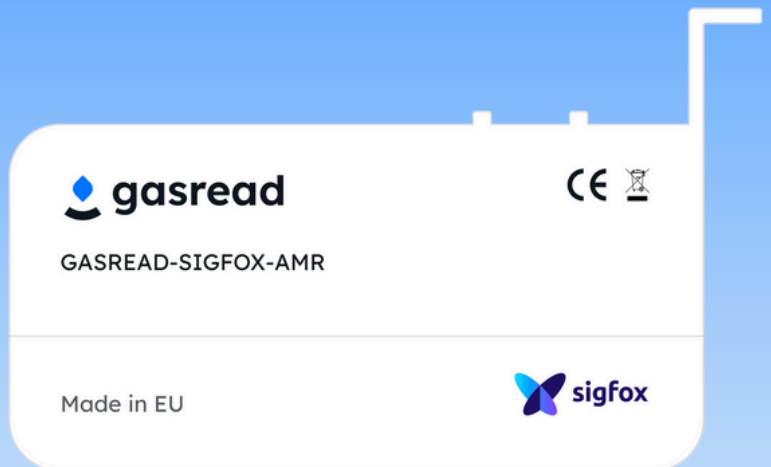




# Revolutionize Your Meter Readings with





## What is Automatic Meter Reading (AMR)?


Automatic meter reading is the technology of automatically collecting consumption, diagnostic, and status data from water meter or energy metering devices (gas, electric) and transferring that data to a central database for billing, troubleshooting, and analyzing.


## Discover the Benefits of Automatic Meter Readings:


 **Precision and Accuracy**  
Say goodbye to human error! Our cutting-edge technology ensures accurate readings every time, reducing billing discrepancies and ensuring fair charges for your customers.

 **Cost Efficiency**  
AMR systems offer precise, real-time gas consumption data, enabling companies to buy the right amount of gas from suppliers and avoid cost overruns or shortages.

 **Eco-Friendly**  
Contribute to a greener future by reducing paper usage and unnecessary vehicle emissions associated with manual meter readings.

 **Time-Saving**  
Automate the reading process and free up your valuable time. No more manual data collection, as our solutions do the work for you, effortlessly and consistently.








 **Enhanced Security**  
Rest easy with the knowledge that your data is secure. Our state-of-the-art encryption and data protection measures guarantee the confidentiality of your meter data.

 **Wireless Communication**  
Harness the power of wireless technology to transmit meter data seamlessly and securely.

# Introducing Byte Lab's AMR products

Innovative, battery-powered smart gas meters utilizing multiple wireless networks for seamless data transfer. Harnessing the power of **Sigfox, LoRa, and NB-IoT** networks, our solution offers cost-effective wireless connectivity for a multitude of gas meters. Equipped with robust tamper detection alarms and an extended battery lifespan, the BL AMR product proves to be the perfect choice for retrofitting existing diaphragm gas meters that lack remote readout capabilities.

## Important Features:

-  Internal or external (optional) antenna
-  Long battery life (≈10 years)
-  Mounts on various gas meter types
-  IP67 protection level
-  Magnetic tampering detection
-  Device removal detection
-  Gas overconsumption detection

## Other Important Information:

### Adapters

In order to accommodate various brands of diaphragm gas meters commonly encountered in the European market, such as Metrix, Elster, and Itron, the BL AMR boasts a versatile modular design, complete with interchangeable adapters.

### Tampering detection

Equipped with internal motion and magnetic field sensors, the BL AMR system detects and promptly reports any instances of attempted magnetic tampering or efforts to remove the device from the gas meter.

### Periodic readout

The device records consumption data at specified time intervals. In addition to presenting the total consumption within a designated time frame, the device also furnishes a breakdown of consumption across six segments within that same time interval.

### Detection of the gas overconsumption

If gas consumption exceeds a predefined limit within a specified time interval, the device promptly transmits an alarm message. This consumption limit is adjustable remotely for your convenience.



## When Should You Choose a Specific Wireless Connection?

### **Sigfox:**

Sigfox, the global and cost-effective IoT protocol, stands out with its affordability and unmatched efficiency in transmitting small data over long distances. Its low-power design extends device lifespans while ensuring global coverage. Users benefit from the simplicity of relying on Sigfox's network operators for reliable service and local coverage, making it the top choice for budget-conscious, long-range, low-power IoT applications.

### **LoRa:**

LoRa is a wireless communication protocol optimized for long-distance IoT applications. It's ideal for low-power devices, offers cost-effective data transmission over unlicensed frequency bands. Unlike Sigfox, with LoRa, you have the option to deploy your own private LoRaWAN network, giving you more control over coverage and infrastructure, making it a flexible choice for various IoT applications.

### **NB-IoT:**

NB-IoT (Narrowband IoT) is a wireless communication standard tailored for IoT applications, with a focus on long battery life and deep coverage. It provides cost-effective data transmission on licensed frequency bands, ensuring global connectivity. However, unlike Sigfox, NB-IoT relies on existing cellular networks, reducing the need for dedicated infrastructure deployment but may involve ongoing subscription costs. It's worth noting that NB-IoT typically has higher power consumption compared to LoRa and Sigfox which results in shorter lifetime of the device.