



Smart Gas Metering

OKO XA05 Wireless Gas Meter Data Logger



Worldwide coverage of NB-IoT bands



Data stored at configurable intervals for up to 20 years



Built-in pulse sensor



Long life battery



Robust design for outdoor operation



Easy to set up & retrofittable on existing meters



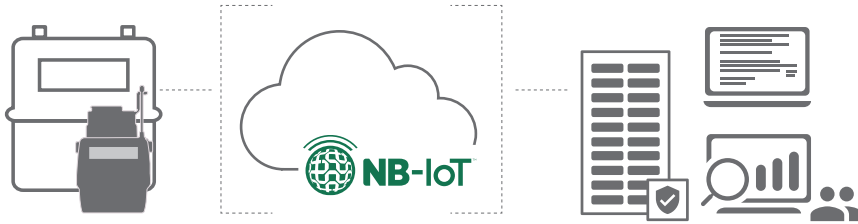
Optional replicated pulse output



ATEX & IECEx certified

OKO XA05 is a battery powered, ATEX & IECEx certified, wireless data logger, that can be easily installed on existing diaphragm meters. Received data from the past few months are stored and transferred over NB-IoT to acquisition server periodically (e.g. daily at specified time). Flexible configuration permits for customization of logged data structures and communication pattern for specific Gas Utility needs.

IMR Smart Gas Metering system that has been designed, developed and manufactured by AIUT consists of communication equipment, data loggers, sensors as well as back-office software package for data acquisition, analytics and presentation.



OKO XA05 installed on gas meter takes pulses from the meter (appropriate adapter on request - see below) and sends the data over NB-IoT to acquisition server. Subsequently, the data can be processed further to 3rd party data center.

Exemplary adapters



IC Rx15-Itron RF1



IC Mx15-Metrix GL



IC Cx15-Itron Cyble



IC Ex15-Elster BK, Landis&Gyr model 750,1010



IC Ux15-for diaphragm/rotary gas meter equipped with pulse output or cable



IC Kx15-Kale Kalip

- Other types of adapters are available on request.
- All adapters are available in version with replicated pulse output.

Functional and Technical Features

Communication

- NB-IoT data transmission
- Quectel BC66 module
- User replaceable micro SIM or eSIM
- Opto port (IEC - 62056-21 standard) for local communication and easy diagnostics
- Optional external SMA antenna

Quectel BC66 module

- Worldwide frequency bands: B1/B2/B3/B4/B5/B8/B12/B13/B17/B18/B19/B20/B25/B28/B66
- Approvals: GCF (Global), CE (Europe), FCC/PTCRB (North America), IC (Canada), KC (South Korea), NCC (Taiwan), JATE/TELEC (Japan), RCM (Australia), NBTC (Thailand), IMDA (Singapore)

Environmental Parameters

- Operating temperature:
 - 40°C to +60°C [OKO XA05-9*00 and OKO XA05-8*00]
 - 40°C to +70°C [OKO XA05- F*00 and OKO XA05- E*00]
- UV resistant
- IP 67

Compliance

- ATEX certificate:
 - II 1G Ex ia IIB T3 Ga [OKO XA05-9*00 and OKO XA05-8*00]
 - II 3G Ex ic IIB T3 Ga [OKO XA05- F*00 and OKO XA05- E*00]
- IECEx FTZU 17.0018X
- RED ▪ LVD ▪ EMC

General Features

- Dimensions:
 - H (w/o antenna) x W x D: 112mm x 91mm x 43mm
- Weight: 382 g

Power supply

- User replaceable long life battery (2xA LiMnO₂ or 1xD LiMnO₂)
- Battery lifetime: up to 10 years (depending on communication pattern)
- OKO XA05 is able to provide battery level and estimated lifetime

User friendly interface

Graphic orientated display with single button control for current readout presentation, extensive diagnostics and easy installation

Data structures

- Hourly data logging by default and other configurable intervals on request
- Current state: temperature, device status, GSM reception, battery state
- Daily maximum instantaneous and hourly flow
- Archive data & alarms
- Tamper detection: cover opening, device removal, external magnet
- In case of missing the data in the system OKO XA05 resends the data for a period of one week