



MacR6-Z0-P

Battery gas pressure monitor with integrated GSM modem registering up to 2 pressures simultaneously

MacR6-Z0-P is a telemetry gas pressure monitoring device. Main purpose of the device is to transmit the data about gas pressure peaks and drops to the SCADA system or to eWebtel. Device is equipped with integral modem working in 5G, 4G and 2G technologies - NB-IoT and LTE Cat.M1. Internal battery ensures multiannual operation. MacR6-Z0-P is assembled in variant for explosive hazardous zone 0.

MacR6-Z0-P features

- New technologies connectivity in NB-IoT and Cat.M1
- D-size lithium battery as a power source. More than 5 years of work on single battery
- Local LCD display for connection quality status and battery level diagnostics
- Optical interface according to IEC 62056 for configuration
- Effective data transmission in difficult environmental conditions
- Dedicated mobile app for instant configuration
- Easily accessible data in SCADA systems

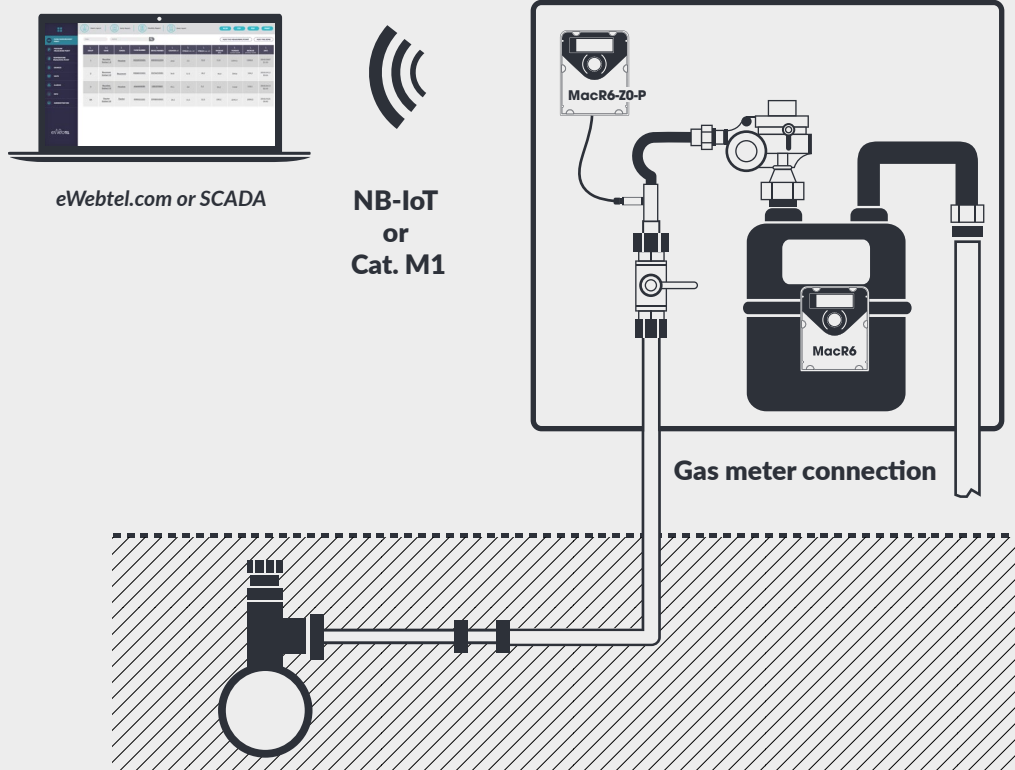
Technical specification

Dimensions	124mm x 85mm x 40mm
Weight	0,7kg
Housing material	Polycarbonate enclosure
Relative humidity	Max 95% at temp. 55°C
Ambient temperature range	-30÷55°C
Housing protection class	IP66 in accordance with requirements of EN 60529 (for outdoor installation)
Ex classification	⊕ II 1 G Ex ia IIA T4 Ga, FTZU16 ATEX 0051X
Display	Graphic LCD with diagnostics icons for battery level, signal strength and current pressure value
Power supply	Replaceable lithium 17Ah battery, operation time: 10 years - report once a week, 5 years - report once a day
Transmission ports	<ul style="list-style-type: none"> • Optical Interface IEC 62056-21, • Cat M1: B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/B20/B25/B26/B27/B28/B66/B85 • Cat NB2: B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/B20/B25/B28/B66/B71/B85
Transmission protocols	Support of TCP, UDP, FTP, NTP, HTTPS transmission protocols
Environment conditions class (Mechanical / Electromagnetic)	M2/E2
Registration periods	<ul style="list-style-type: none"> • Data registered periodically: recording interval from 1 up to 60 minutes – 19000 records • Hourly data: more than 1 year • Daily data: more than 1 year • Monthly data: more than 40 years • Events memory: approximately 200 records
Inputs/sensors	<ul style="list-style-type: none"> • Accelerometer sensor • Cover opening sensor • Gauge pressure ranges: 0÷7kPa/ 0÷30 kPa/ 0÷700 kPa • Pressure sensor p2 (optional)–gauge 0÷10 MPa • External pressure sensors is ended with metric screw M12 x 1.5 (Ermeto) thread
Control outputs	2 digital outputs: - 1x configurable binary or LF, Counters replication: Vm ,E - 1x configurable binary

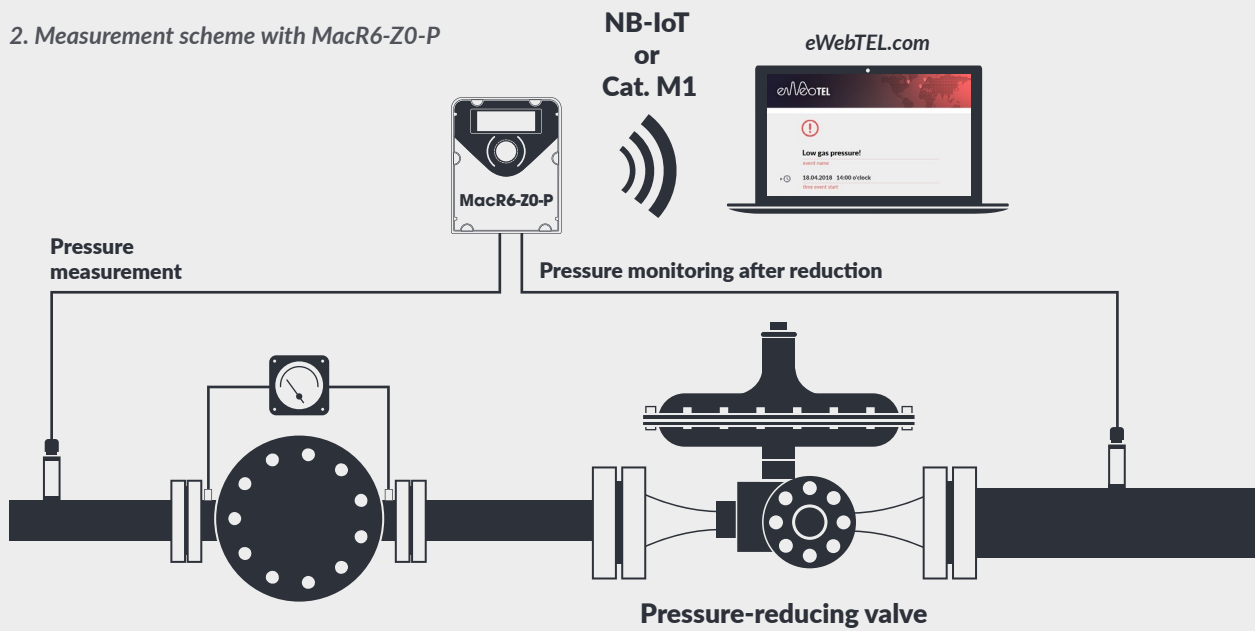


Application

1. Monitoring the tip of the gas network with MacR6-Z0-P



2. Measurement scheme with MacR6-Z0-P



3. Local readout and configuration with OptoBTEx





MacR6-Z0-P accessories



Antenna GSM/GPRS

Magnetic mounting base, FME male connector, 1.5M cable

Features:

- Frequency: 900/1800MHz
- Input impedance (ohms): 50
- VSWR: ≤ 1.5
- Polarization Type: Vertical
- Gain (dBi): 3
- Cable Type: RG174



OptoBTeX | Optical-bluetooth interface

Communication interface OptoBTeX is a wireless data transmitter with IEC 62056-21 compatible devices. The transmission is performed via Bluetooth 2.1+EDR Class 2 for Android devices (smartphones, tablets). It also has ability to for wired USB communication via microUSB cable.



MacR6 holder | For horizontal or vertical installation

Universal MacR6 holder allowing for horizontal or vertical installation on pipeline using cable ties. Montage holes allowing for installation on flat surfaces using screws. Possibility of sealing the device along with the holder to prevent from dismounting. Durable construction resistant to impacts and weather conditions.



eWebTEL | Software

System eWebTEL is a platform aggregating measurement data intended for comprehensive supervision over monitored gas network. It enables to graphically visualize data sent from the resolvers, manometers and recorders, geo-location of devices. It also allows to overview history of recorded data and generation of reports concerning: monthly gas consumption along with hour peaks by particular receivers or group of receivers, history of gas consumption by particular receivers or group of receivers, failure occurrences and times, history of parameter values defining a condition of gas network.



Confit! data loggers | Application

Application designed for mobile devices with the Android system (smartphones, tablets). It is available for free download from Google play.

