

MacR6-Z0-P

MacR6-Z0-P is an instrument designed to monitor gas pressure and immediately inform about exceeding of adjusted thresholds through cellular network thanks to internal modem working in NB- IoT, ITF-M or 2G.

Device is equipped with up to two pressure sensors with possibility to cover the range from 0.1 to 100 bar, which can be installed in Ex Zone 0.

Main purpose of the device is to monitor the grid endpoints and the gas regulators stability.

Plum Sp. z o.o. ul. Wspólna 19, Ignatki, 16-001 Kleosin, Poland National Waste Database No.: 000009381

gas.plum.pl gas@plum.pl

edition 1.2b, 09.10.2025

key benefits

- instant alarming about pressure unwanted and sudden changes
- pressure trend monitoring with minimum and maximum value from each hour
- possibility to add the significance to the alarming - various alarm thresholds with flag of alarm and warning
- two independent pressure measurement channels with own adjustable limits
- quick installation requiring minimal amount of tools
- factory set-up option to install without any configuration on the object, using eWebtel platform configuration can be finished remotely

technical data

dimesnions/ weight	124 x 90 x 40mm/ 1.0 kg
housing material	polycarbonate
relative humidity	maximum 95% at temperature of 55 °C
ambient temperature range	from -30 °C to 55 °C
housing protection class	IP66 in accordance with EN 60529 for outdoor installations
Ex feature	II 1 G Ex ia IIA T4 Ga certificate: FTZÚ 16 ATEX 0051X
display	graphical LCD display allowing device diagnostics and showing current pressure value
transmission protocols	GAZ-MODEM 2/3 support for TCP/UDP/NTP
resistance to mechanical and electromagnetic conditions	M2/ E2
power supply	replacable lithium battery D-size, 3,6 V/ 17 Ah; operation time: LTE-M/ NB-IoT - up to 10 years, 2G - up to 5 years
transmission	 optical interface LTE-M (LTE Cat.M1), bands: B1/ B2/ B3/ B4/ B5/ B8/ B12/ B13/ B18/ B19/ B20/ B25/ B26/ B27/ B28/ B66/ B85 NB-IoT (LTE Cat.NB2), bands: B1/ B2/ B3/ B4/ B5/ B8/ B12/ B13/ B18/ B19/ B20/ B25/ B28/ B66/ B71/ B85 2G (EGPRS): 850/ 900/ 1800/ 1900 MHz
registration period	 data registered at intervals of 1-60 minutes; around 6 months of data storage memory of events - 128 records
inputs/ sensors	 housing opening sensor up to 2 pressure sensors with ranges 0÷0.1/ 0÷0.3/ 0÷6/ 0÷10/ 0÷16/ 0÷35/ 0÷70/ 0÷100 bar pressure sensors ended with metric thread M12 x 1.5 (Ermeto) or NPT 1/4"
accessories	eWebtel - measuring data acquisition system ConfIT! - configuration software for PC ConfIT! data loggers- mobile application OptoBTEx 2 - optical interface

features

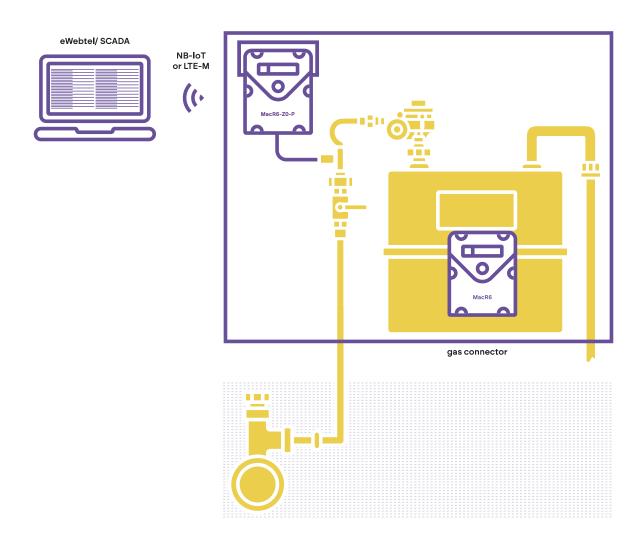
- support for LPWAN mobile network data transmission technologies: LTE-M (LTE Cat.M1) and NB-IoT (LTE Cat.NB2)
- support for Mobile Virtual Network Operators (MVNOs)
- optical interface for configuration
- data transmission in difficult conditions
- event-based sending of data on exceeding pressure limits
- 2 independent pressure monitoring channels in one device

application

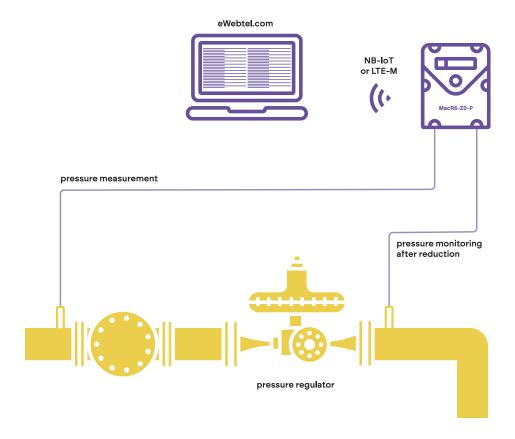
pressure

monitoring

Monitoring pressure at the end of the gas grid using MacR6-Z0-P.



application diagram



local reading and configuration



