

# MacR6-Z0-P

gas pressure data logger with  
built-in IoT telemetry module

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, LTE-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.

## 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

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**edition**  
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## technical data

<b>dimesnions/ weight</b>	124 x 90 x 40mm/ 1.0 kg
<b>housing material</b>	polycarbonate
<b>relative humidity</b>	maximum 95% at temperature of 55 °C
<b>ambient temperature range</b>	from -30 °C to 55 °C
<b>housing protection class</b>	IP66 in accordance with EN 60529 for outdoor installations
<b>Ex feature</b>	II 1 G Ex ia IIA T4 Ga certificate: FTZÚ 16 ATEX 0051X
<b>display</b>	graphical LCD display allowing device diagnostics and showing current pressure value
<b>transmission protocols</b>	GAZ-MODEM 2/3 support for TCP/UDP/NTP
<b>resistance to mechanical and electromagnetic conditions</b>	M2/ E2
<b>power supply</b>	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
<b>transmission</b>	<ul style="list-style-type: none"><li>• IEC 62056-21 optical interface</li><li>• LTE-M (LTE Cat.M1), bands: B1/ B2/ B3/ B4/ B5/ B8/ B12/ B13/ B18/ B19/ B20/ B25/ B26/ B27/ B28/ B66/ B85</li><li>• NB-IoT (LTE Cat.NB2), bands: B1/ B2/ B3/ B4/ B5/ B8/ B12/ B13/ B18/ B19/ B20/ B25/ B28/ B66/B71/ B85</li><li>• 2G (EGPRS): 850/ 900/ 1800/ 1900 MHz</li></ul>
<b>registration period</b>	<ul style="list-style-type: none"><li>• data registered at intervals of 1-60 minutes; around 6 months of data storage</li><li>• memory of events - 128 records</li></ul>
<b>inputs/ sensors</b>	<ul style="list-style-type: none"><li>• housing opening sensor</li><li>• 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</li><li>• pressure sensors ended with metric thread M12 x 1.5 (Ermeto) or NPT 1/4"</li></ul>
<b>accessories</b>	eWebtel - measuring data acquisition system ConfIT! - configuration software for PC ConfIT! data loggers- mobile application OptoBTEx - optical interface

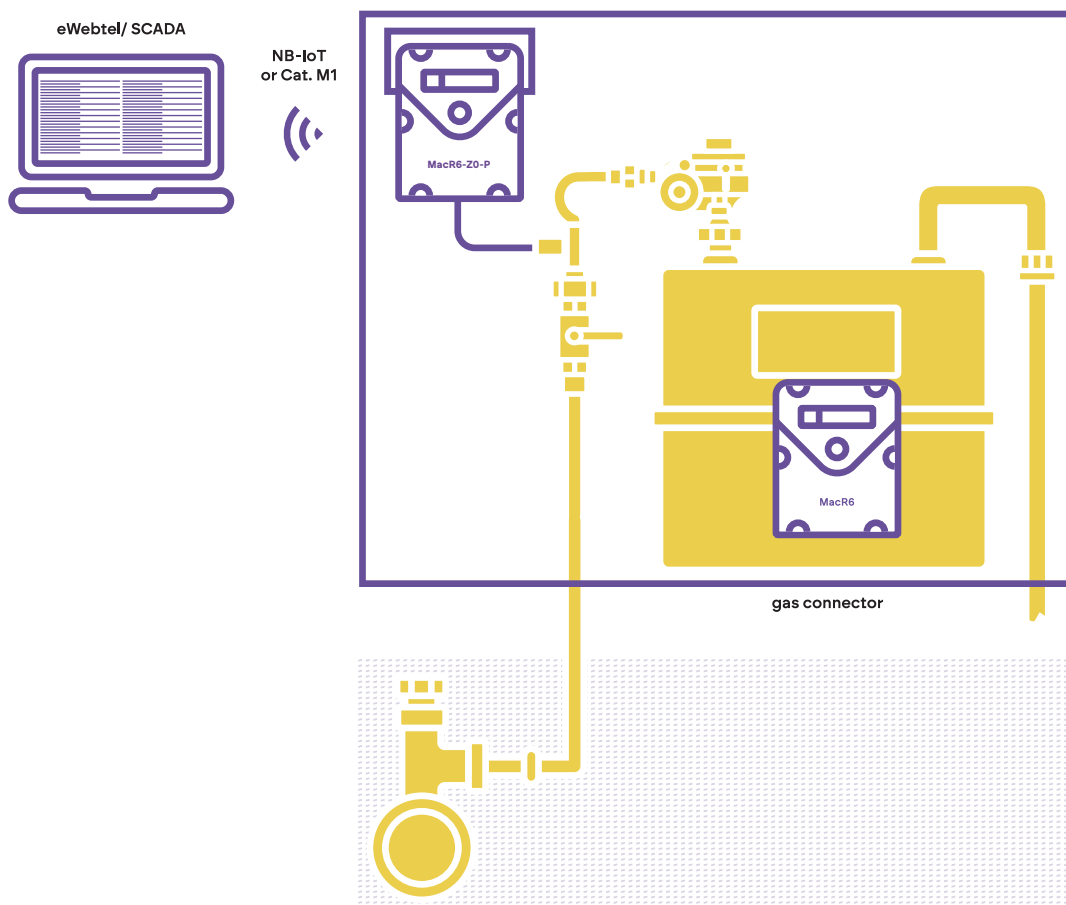
## features

- 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)
- IEC 62056 optical interface for configuration
- effective data transmission in harsh environments
- event-based sending of data on exceeding pressure limits
- two independent pressure monitoring channels in one device

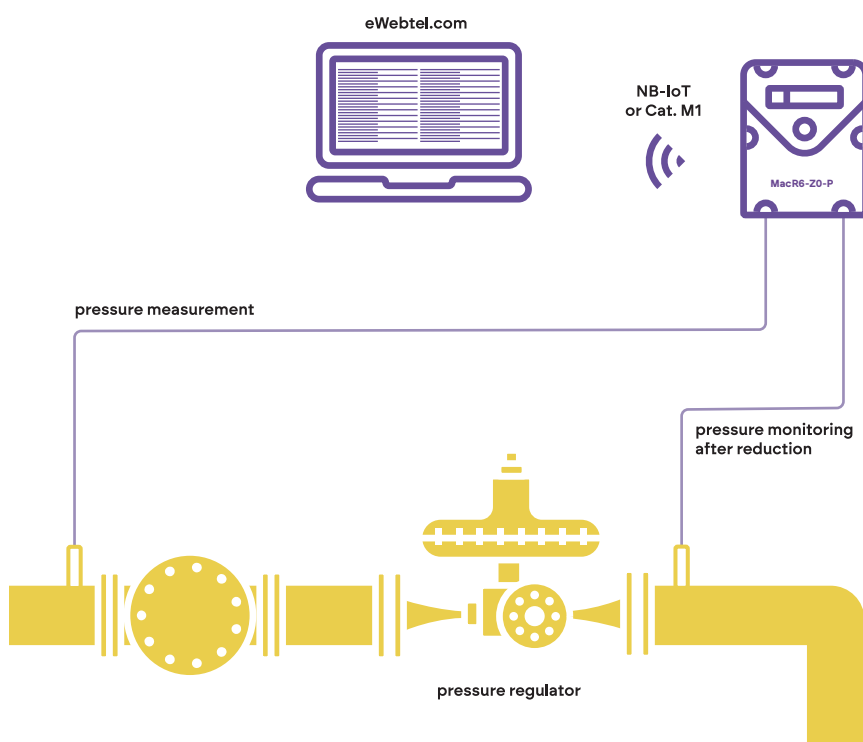
# application

## pressure monitoring

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



## application diagram



## local reading and configuration

