

MOBILE GAS METER GM-1



Catalogue card



DESCRIPTION

Mobile Gas Meter GM-1 is designed to work in all types of mine railways (floor-mounted rail, monorail, diesel-locomotive, battery-powered), longwall shearers, roadheaders and all the other moving machines used in mines. It is designed for continuous operation.

GM-1 has four relay outputs. These outputs can be used for driving power switch to machines e.g. in case of exceeding the concentration of methane. Gas meter beside relay (opto-mos) outputs has RS422 interface and analog output (depending on device version it can be voltage output 0-10V, 0-5V or current output 4-20mA).

The Mobile Gas Meter system consist of three cooperating types of devices:

- Junction Box **GM-1JB/x** (main controller)
- Terminal Box **GM-1TB** (user terminal)
- The Remote Probe **R-X** (gas sensor)

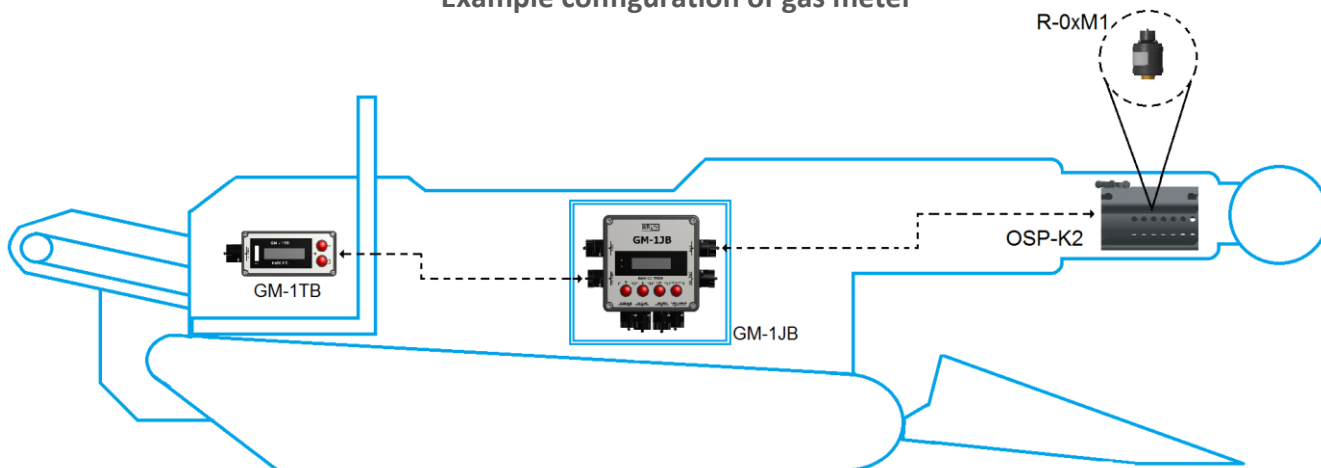
The device is equipped with rechargeable battery. In case of no external power supply the device can operate autonomously for a period of about 10 hours. Mobile Gas Meter GM-1 is M1 category device.

BASIC TECHNICAL DATA

Mobile gas meter GM-1

Power supply / charging	$U_n = 10V \pm 16V$, $I_n = 500mA$ (dla $U_n = 12V$)
Power supply autonomy	10 hours
Measurement method	using attached probe, type R-x
Digital interface	RS422
Analog interface	0-10V/0-5V lub 4-20mA
Working temperature range	from $-10^\circ C$ to $+40^\circ C$
Relative humidity range	to 95% without condensation
Dimensions	GM-1JB/x : 160 x 160 x 90mm; GM-1TB: 75 x 160 x 56mm
Weight	GM-1JB/x : ok. 2,5 kg; GM-1TB: ok. 1kg
Casing internal protection	IP54
Safety Integrity Level	SIL 1 (for configuration I - see manual) or SIL 2 (for configuration II - see manual)

Example configuration of gas meter



EXPLOSION-PROOF MARK

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EC type examination certificate: TEST 14 ATEX 0063X; TEST 14 ATEX 0062X
Certificate of Conformity (PN-EN 60079-29-1:2010): OBAC/0178/CZ/15