

picoELCOR is ELGAS series of SMART diaphragm gas meters integrating the electronic index, volume conversion, datalogger and GSM/GPRS/SMS modem with ELSTER or APATOR METRIX mechanical diaphragm gas meter body.

Solid mechanical design, proven technology and use of the latest low power microprocessor technology with high processing power brings to customer guarantee of smooth functioning and space for future software and hardware extensions.

The volume measurement principle is based on measuring of gas flowing through mechanical units. Each unit has four measuring chambers, separated by synthetic diaphragms. The mechanical movement is transferred through the gears to a crankshaft controlling the valves.



Diaphragm gas meter with electronic index and integrated EVC

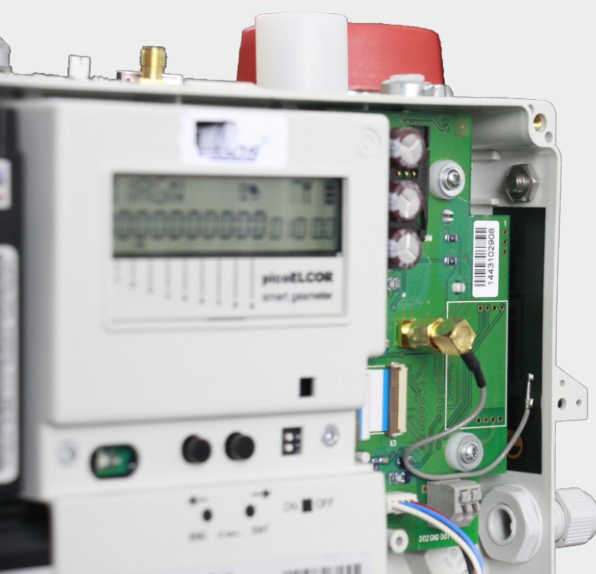
picoELCOR



Highlights

- All-in-one solution
- Integrated PTZ volume conversion
- High accuracy and stability of measurement
- Embedded 2G modem
- MID and ATEX approved
- Designed for hazardous area ZONE 1
- Pulse output
- Long battery life
- Sizes G10, G16, G25

Generation 4 you



Rotating movement is scanned by tamper proof optical element. This optical element ensures maximum protection against an external magnetic fields helping to eliminate tampering of the meter.

The base volume is calculated on the basis of precise measurement of the pressure, temperature and using conversion formula. Pressure and temperature transducers are integrated into the gas meter body.

The electronic index with LCD display, controlled by two button keypad (accessible after opening of the front cover) gives the information about measured volume and offers user friendly interface to the customer for reading of data. The integrated battery powered GSM/GPRS/SMS modem transfers the collected data via cellular network.

Power supply is realized by two separate lithium batteries (EVC battery and modem battery) enabling to power the device for up to 15 years (metrological part).

Technical specifications

General

Protection class	IP 65 (EN60529)
Working temperature	-25°C to +55°C
Control panel	2 button keypad shielded by the front cover
Display	Alphanumeric multisegment LCD with icons
Measuring temperature range	-25°C to +55°C
Measuring pressure range	0.8 -1.6 bar (absolute)
Total accuracy (MPE)	1.5 %
Communication interface	optical interface (IEC 62056-21) GSM/GPRS modem
Digital outputs	1 digital output - pulse or analog output (CL-1 module is required for the analog output)
Battery power supply (metrology)	B-02 lithium battery, 3.6V, battery life >15 years in defined conditions
Battery power supply (modem)	HB-02 lithium battery, 3.6V, battery life >5 years in defined conditions
Metrological type approval MID 2014/32/EU, EN 1359, EN 12405-01	TCM 143/13 - 5018
ATEX approval 2014/34/EU Classification (EN 60079-0, EN 60079-11, EN 13463-1, EN 13463-5)	FTZÚ 13 ATEX 0024X Ex II -/2 G IIA T3, ZONE 1

Flow rates

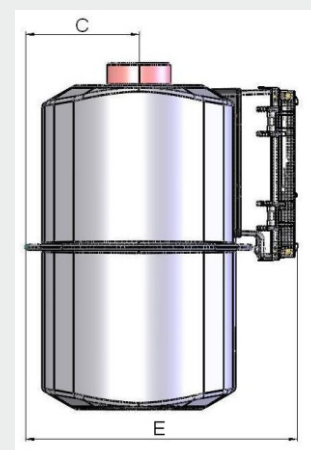
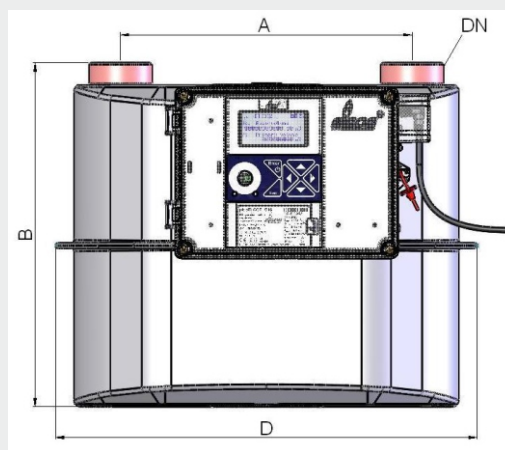
	Qmin [m ³ /h]	Qmax [m ³ /h]	V [dm ³]
	operating conditions = base conditions		
picoELCOR v.2 (v.3) G10	0.1	16	6 (5.6)
picoELCOR v.2 (v.3) G16	0.16	25	6 (5.6)
picoELCOR v.2 (v.3) G25	0.25	40	12 (11.2)

Dimensions and weight

	Dimensions [mm]					Weight [kg]
	A	B	C	D	E	
picoELCOR v.2 (v.3) G10	250	320 (349)	85 (94)	334 (398)	243 (250)	5.3 (7.5)
	280	330 (349)	108 (94)	405 (398)	259 (250)	6.9 (7.5)
picoELCOR v.2 (v.3) G16	280	330 (349)	108 (94)	405 (398)	259 (250)	6.9 (7.5)
picoELCOR v.2 (v.3) G25	335	398	138	465	313	11.2

Connection

	DN	Thread
picoELCOR v.2 (v.3) G10	25	1 1/4"
	32	1 3/4"
picoELCOR v.2 (v.3) G16	40	2"
picoELCOR v.2 (v.3) G25	50	2 1/2"



...get the best from ELGAS longtime experience

