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Modus mini

Modus mini is a highly efficient single-channel electronic volume converter (**EVC**) with a built-in modem, powered by long-life batteries. Equipped with a **piezoresistive pressure sensor** and **PT1000** for temperature measurement, it complies with **ATEX/IECEx** and **MID** directives and is **suitable for installation in Zone 1 hazardous areas** with gas of the IIC group. Designed for commercial and industrial applications, Modus mini ensures reliable performance with minimal power consumption.

Medium / small industry   Biomethane production   City gates

Features	Values
Pressure sensor ranges	0.8 ÷ 2 bara, 0.6 ÷ 3.5 bara, 0.9 ÷ 10 bara, 5 ÷ 24 bara, 10 ÷ 40 bara, 20 ÷ 80 bara 80 ÷ 200 kPa, 60 ÷ 350 kPa, 90 ÷ 1000 kPa, 500 ÷ 2400 kPa, 1 ÷ 4 MPa, 2 ÷ 8 MPa
Temperature sensor range	-30 °C to +60 °C -22 °F to +140 °F
Ambient conditions	-25°C to +70°C -13°F to 158°F Relative humidity up to 95% (condensing/non condensing) Saline environment
Ingress protection	IP 66
Digital Inputs	1 LF pulse input up to 3Hz 1 Digital input General purpose
Digital outputs	3 Outputs Open Drain
Compressibility formulas	· AGA 7 . AGA-8 DC92 (Detailed / ISO 12213-2) · AGA NX19 mod · S-GERG 88 · M-GERG 88 (mod. H2)
ATEX Certification	II 2G Ex ib IIC T4 Gb
Power supply	Metrology Battery: 2 cells LiSOCl2 size D 38 Ah Battery life 15 Years in defined condition Modem Battery:1 cell LiSOCl2 size D 19 Ah Battery life up to 5 Years (1 connection/Day)
Local interfaces	Graphic display 128x24, 6 keys Optical port compliant with EN62056-21
Wireless communication	2G / Cat-M1 / NB-IoT with embedded modem
Communication protocols	IEC 62056 DLMS Cosem + UNITS 11291-14 MODBUS RTU
Dimensions / Weight	280 x 172 x 50 mm / 2 Kg

Table 1 Features

Materials and Approvals

Part	Material
Housing material	PC+ABS

Table 2 Materials

Modus mini is designed according to European standards EN 12405-1, EN 12405-2, IEC 60079-0, IEC 60079-11.
The product is CE marked and certified according to European Directive 2014/32/EU (MID) and 2014/34/EU (ATEX).

EN12405-1   EN12405-2   IEC 60079-0   IEC 60079-11   MID   ATEX

Modus mini competitive advantages

- NB-IoT and LTE Cat-M embedded modem
- Long battery life
- Easy to install, plug and maintain in the field
- Compact design
- Cybersecure
- Low energy consumption
- Simple HMI with LCD display and six buttons keyboard
- Suitable for up to 20% Hydrogen blending application