

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-8 GM1/GM2 · AGA NX19 mod · S-GERG 88 · M-GERG 88 (mod. H2)
ATEX Certification	II 1G 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