UNIGAS 300

Electronic gas volume converter for all applications

Versatile

Large memory capacity

No earthing required

Communication

Easy operation

Long battery life

Easy operation

General

UNIGAS 300 is a compact MID approved gas volume converter which is easy to use for the end-user and for the gas utilities as well.

UNIGAS 300 is available in 4 different versions: T. TZ, PT and PTZ. The compressibility calculation can be done according to SGERG, AGA 8 or AGA NX 19. Independently from the version, UNIGAS 300 has a robust aluminium casing and IP65 protection class, which enables outdoor use. By its ATEX approval for zone 0, UNIGAS 300 can always be placed directly on the gas meter.

UNIGAS 300 has 3 counter inputs, from which input one is used as converter input. Input one is freely programmable as Encoder (Namur),- Low Frequency,- or High Frequency input. This assures maximum flexibility for the type of gas meter used, for today and tomorrow. UNIGAS 300 accepts the Encoder signal of all gas meter manufacturers. The 2nd input of UNIGAS 300 can be configured as control input for input one, or can be used as separate counter for any other type of meter. Input 3 is a Low Frequency input for other meters as well.

Pressure ranges

The most compact version of UNIGAS 300 is achieved with an internal pressure sensor. Optionally an external pressure sensor is available. Standard, but not limited to, the following pressure ranges are available:

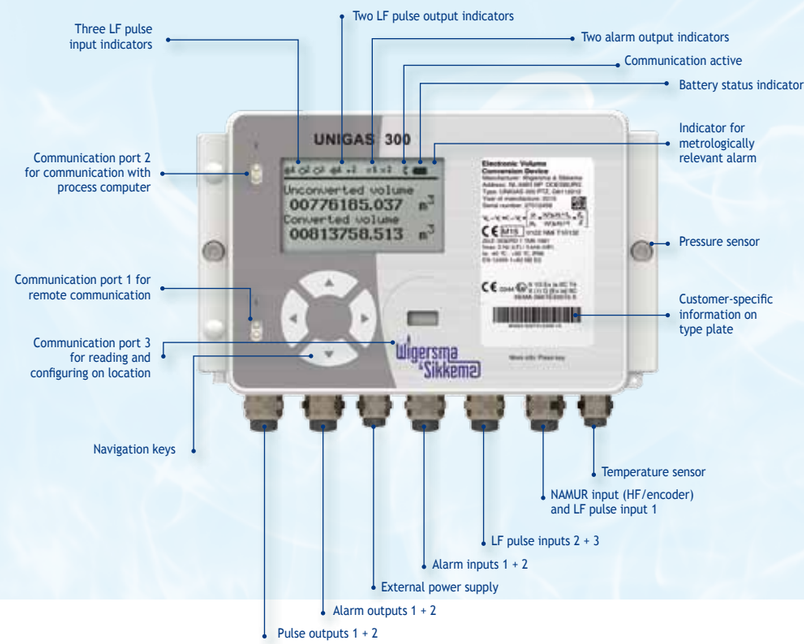
- 0,8 - 2,5 bar abs.
- 2,5 - 10 bar abs.
- 0,9 - 6,0 bar abs.
- 5,0 - 20 bar abs.

Large memory capacity

Advanced Memory

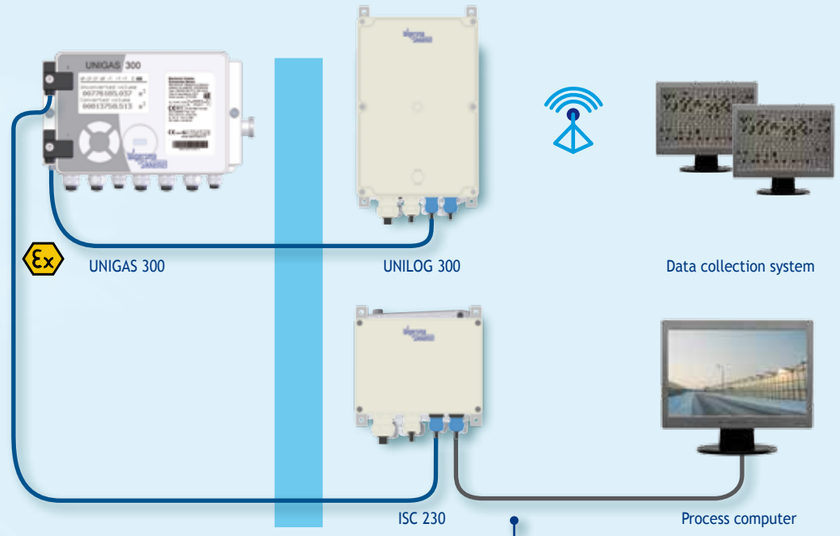
UNIGAS 300 has ample memory space for data storage. Every 5-minutes the measured and converted values are stored in the interval logger. The memory of UNIGAS 300 can store these 5-min values over a period of 150 days. Stored values can be retrieved and displayed in just a few logical steps. It can be decided whether 5, 10, 15, 30 or 60-min values are to be shown.

As UNIGAS 300 always stores the values in the memory every 5-minutes, the history can be accurately analysed. On the basis of these 5-min values it is also possible to prepare very detailed consumption profiles. Metrological changes are stored in the metrological logbook, which has a capacity of 360 entries. Status information about like e.g. power supply, warnings and alarms, are stored in the status logbook.



Easy installation

UNIGAS 300 for central data collection and for local energy management



Communication

Communication

Actual data provides crucial information, not only for the gas supplier, but also for the end-user. For this purpose 2 serial ports are available. Via one of the two communication ports the end user has the possibility to get actual data from UNIGAS 300 to avoid high consumption peaks, and to stay within contract limits. This enables the end user to save gas and avoid penalties from the gas utility. An additional serial port is available to read out and configure locally.

UNITOOL Software

Via the user friendly UNITOOL software UNIGAS 300 can be read and configured locally and remotely, by either a GSM or IP connection. UNITOOL is available in Dutch, German, English, Danish and Italian.

Long battery life

Battery supply

By using a battery UNIGAS 300 can work fully on its own for a long time. UNIGAS 300 can be provided with a lithium D-cell, or with a lithium DD-cell for extra-long life; up to 15 years. If wished, an external power supply can be connected. In this case the battery functions as a back-up.

UNILOG 300

- **Available as battery or 230 VAC GSM/GPRS modem**
- **Antenna integrated**

Additional functionality for the 230VAC version

- **External power supply for UNIGAS 300**
- **Ex-barrier**
- **RS232 / RS485 converter (optional)**
- **Ethernet (optional)**

ISC230B

- **Ex barrier for serial connections**
- **Ex barrier for signal outputs**
- **RS232/ RS485 converter (optional)**
- **Analog modem (optional)**

Technical Specifications

Wigersma & Sikkema

Housing	Housing: coated aluminium 194 x 120 x 70 mm IP Class: IP 65 Display: 66 x 33 mm, 8 lines x 20 characters Navigation keys: 4
Approvals	MID approved by NMi, T10132 PTB approved, 7.732 / 11.46 ATEX approval 08ATEX0015X
Compressibity calculation	Calculation according to S-GERG, AGA 8, AGA NX 19
5 inputs	1. Converter input, LF (2 Hz), or HF (5 kHz) or Encoder (Namur) 2. LF (2Hz) or Encoder (when Input 1 is LF) with compare function 3. LF (2 Hz) 4. Alarm input 5. Alarm input
4 pulse outputs	2 Alarm outputs, freely programmable 2 Impulse outputs, freely programmable
Standard pressure	0.8 - 2.5 bar abs., 0,9 - 6 bar abs, 2.5 - 10 bar abs., 5 - 20 bar abs.
Temperature	Temperature measurement: 2-wire Pt500 Temperature range gas: -40°C ... + 55°C Ambient temperature: -40°C ... + 55°C
Memory capacity	Interval logger: every 5 minutes (fixed) over 150 days Daily logger: 100 days Monthly logger: 36 months
Power supply	Battery powered device, with Lithium Dor DD-cell. Lifetime at standard conditions 15 years External power connections available: 6 - 10 VDC UNILOG 300-230 VAC
Communication protocol	IEC 62056-21 (former 1107) protocol Idom Modbus

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