



## gAVC 1200 Gas Conversion Device



### Features

- Quick and easy installation
- User friendly
- Compliant with MID approval
- Long battery lifetime
- Optional:
  - Process in- and outputs
  - Encoder input
  - Mains powered 230 VAC
- The EVCD can be provided with communication equipment: gACC-499



gACC-499

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#### gAvilar

gAvilar is a leading manufacturer of electronic volume correctors and communication devices, gas pressure regulators, safety auxiliary parts, to complete gas pressure regulating and metering stations. We also provide comprehensive services such as performing maintenance on (natural) gas equipment and systems and Scios approvals 7a, 7b and 11. For more detailed information please visit our website [www.gavilar.nl](http://www.gavilar.nl)

#### High-end volume conversion device

The gAVC 1200 is a high-end low power electronic gas volume conversion device with special consideration given to quick and user friendly installation. With a low power consumption of the EVCD the battery lifetime is up to 15 years.

Volume conversion direct from a gas meter with encoder is possible by placing an encoder-input board in the gAVC 1200. This will result in a fully digital volume conversion.

#### Flexibility

The gAVC 1200 can be built to customer specific requirements, from a standard battery powered device (TZ or PTZ) to an advanced multi-functional state of the art Flow Computer.

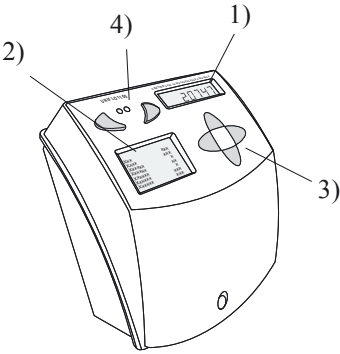
Future demands can be adapted by adding new boards. The gAVC 1200 can be used as a stand-alone device, or as an integrated part of a complete billing system (AMR) where data is read at regular intervals.

#### Options

The gAVC 1200 provides 7 option board connectors to extend the basic conversion function with additional I/O such as:

- Process in- and outputs
- Special meter inputs (proximity sensors, orifice meters)
- Encoder input (also on battery supply)
- Remote reading modules
- Mains powered

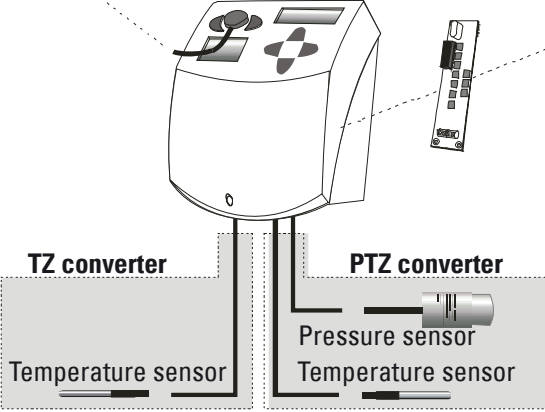
## Technical specifications



- 1) LCD-display (8 digits). Shows converted volume and other main readings.
- 2) Menu controlled graphical display (8 lines, each with 21 characters). The menu structure is configurable.
- 3) Key-pad for scrolling the displays.
- 4) IR interface, IEC62056-21 compatible.

### Basic model and options

IR interface to be connected with a PC



#### Option boards

- a) Power supply - 230 VAC
- b) HF input (A+B) with error curve correction
- c) Encoder input
- d) Analogue outputs
- e) Analogue inputs (4-20 mA for pressure and temperature)
- f) Analogue input for ISO 5167 orifice meter.
- g) Communication controller, for GSM/GPRS/PSTN/ETHERNET, multidrop bus and protocol conversion.
- h) PSTN modem
- i) GSM/GPRS modem

#### Pressure ranges (barA or kgf/cm<sup>2</sup>):

0,6-2, 0,9-6, 2,5-14, 5-30, 13-80

#### Temperature range:

-40°C to +70°C (for gas- and ambient temperature).

#### In- and outputs

(standard version without option boards):

Gas meter	2 LF inputs (Pulse compare function).
Alarm	1 input (e.g. tamper function).
Pulse output	2 (configurable)
Alarm output	1
Serial ports	1 optical (IEC62056-21), 1 serial (2 wire, half duplex), RS-232 on request, MODBUS RTU protocol supported.

#### Accuracy:

Conform EN 12405-1.

Accuracy: < 0.2 % of the measurement on the entire pressure and ambient temperature range.

#### Power supply:

Battery: Up to 15 year at normal operation. The gAVC 1200 is powered by one single Lithium D-Cell.

External: The gAVC 1200 with internal power module can be supplied with 5 VDC from an external power source complying with ATEX. For non ATEX applications the gAVC 1200 can be equipped with a 230 VAC power module. gAvilar offers several solutions for external power supplies complying with ATEX.

#### Data logging:

Built-in data logger with a capacity of more than 100 days based on logging hourly values for 8 parameters.

#### Z-calculation:

AGA 8 (DCM, GCM1, GCM2), SGERG-A-B-C-D, AGA NX 19 G9 (PTB), CO<sub>2</sub>.

#### Mechanical:

Enclosure class: IP 65 according IEC 60529

#### Metrological approval:

MID T11112 approval performed by NMI.  
Approved according to EN 12405-1.

#### ATEX approval:

Classification:  IIC(1)G Ex ib[ia]IIB T3  
Certificate: DEMKO 17 ATEX 1985X

#### Remote reading:

The gAVC 1200 located in the hazardous area can be equipped with an external communication device located in the safe area. Communication is available for GSM/GPRS/PSTN and Ethernet. The communication box provides external power to the gAVC 1200 and complies with ATEX.

#### Setup software – “gAVC Config”:

The supplied user friendly PC software (All Microsoft™ Windows® operating systems are supported), can be used for both reading and parameterization (e.g. setting up the pulse value, modifying the gas composition etc.) of the gAVC 1200.

The “gAVC Configuration Program” includes a tool for building a customized menu system, in local language, matching your specific needs. The program can be installed in several languages.