



## **gAVC 1200L**

### **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

### **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. For more detailed information please visit our website [www.gavilar.nl](http://www.gavilar.nl)

### **High-end volume conversion device**

The gAVC 1200L 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 1200L. This will result in a fully digital volume conversion.

### **Flexibility**

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

Future demands can be adapted by adding new boards. The gAVC 1200L 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.

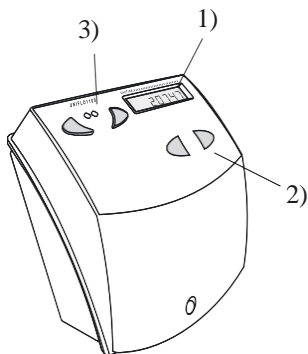
### **Options**

The gAVC 1200L 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

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## Technical specifications



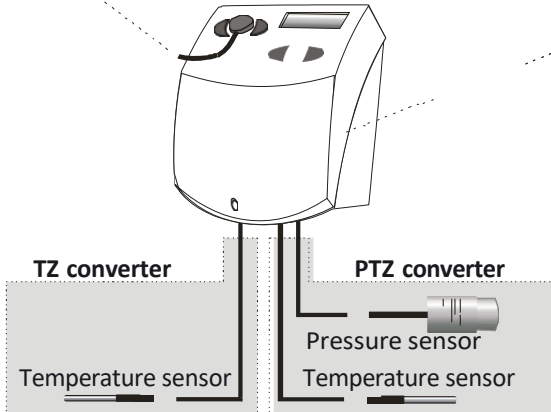
1) LCD-display (8 digits). Shows converted volume and other main readings.

2) Key-pad for scrolling the displays.

3) 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 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 1200L is powered by one single Lithium D-Cell.

External: The gAVC 1200L with internal power module can be supplied with 5 VDC from an external power source complying with ATEX. For non ATEX applications the gAVC 1200L 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:  II 1G Ex ia IIB T3 Ga  
Certificaat: DEMKO 17 ATEX 1985X

Classification:  II 1G Ex ia IIB T3 Ga

Classification:  II 2G Ex ib IIB T3 Gb

Certificate: TÜV 18 ATEX 220433X

Classification:  II 2G Ex ib IIB T3 Gb

Certificate: TÜV 17 ATEX 211195X

### Remote reading:

The gAVC 1200L 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 1200L 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 1200L.

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.