





# **GLOROS XLE**



Gas volume corrector



Visit us!  
[www.ente.com.pl](http://www.ente.com.pl)

 ul. Gaudiego 7  
44-100 Gliwice

 +48 32 33 82 200  
 +48 32 33 82 210

 [ente@ente.com.pl](mailto:ente@ente.com.pl)  
 [www.ente.com.pl](http://www.ente.com.pl)



# GLOROS XLE

## Gas volume corrector

The device is approved for use with other intrinsically safe circuits located in zones 1 and 2, the explosive mixture of gases, vapors and mists with air, qualified for explosion groups IIA, IIB and IIC.

### Description of the device

Gas volume corrector GLOROS XLE is a microprocessor device for measuring and recording the volume of gas, converted to the base conditions (101.325 kPa and 0 degrees Celsius).

Built-in GSM / GPRS modem allows you to remotely supervise the operation of the device, so that it is possible to immediately detect any abnormalities. Built-in protocols allow for communication with chromatographs, so that the device always reads the current composition of the gas, and with built-in interfaces can transfer this information to other conversion or surveillance system. The variety of communication interfaces are implemented, the device allows easy integration with SCADA infrastructure and terminals used for reading archive data from the calculator.

The variety of communication interfaces are implemented, the device allows easy integration with SCADA infrastructure and terminals used for reading archive data from the calculator. The possibility of various hardware configurations, you can customize the calculator to the actual needs of the customer, and allows working with different systems of measurement for natural gas.

### Compliance

#### Metrological properties:

- ≡ ZN-G-4001
- ≡ PN-EN 12405-1:2005
- ≡ PN-EN 12405/A1:2006.

#### Intrinsically safe:

- ≡ PN-EN 50014:2004
- ≡ PN-EN 50020:2005
- ≡ PN-EN 60079-0:2006
- ≡ PN-EN 60079-11:2007

#### The level of electromagnetic interference:

- ≡ PN-EN 55022:2000/A1:2003/A2:2004
- ≡ PN-EN 61000-6-3:2004
- ≡ ETSI EN 301 489-1 V1.6.1
- ≡ ETSI EN 301 489-7 V1.2.1

#### Resistance to overturning and vibration:

- ≡ PN-EN 60068-2-64:2002(U)
- ≡ PN-EN 60068-2-31





## Functionality converter

- ≡ Measuring and recording the volume and flow measured, the calculation of volume and flow in terms of basic and user-defined contractual terms.
- ≡ Cooperation with many strings of measurement.
- ≡ Cooperation with chromatographs.
- ≡ Cooperation with the unit installed.
- ≡ Communication with the conversion rate through interfaces RS-232, RS-422, RS-485, LAN, built in GSM / GPRS / CSD using GazModem2 protocol, Modbus RTU, Modbus ASCII, Modbus TCP.
- ≡ Ability to read and resolver configuration storage and archival records via USB storage using "Pen Drive".
- ≡ Security software as WELMEC 7.2.
- ≡ Authentication is read and saved your configuration, data conversion and private key archival SHA. The web interface allows you to view the most important parameters of conversion from a web browser.
- ≡ The ability to send daily data from the calculator to the specified e-mail address.
- ≡ You can synchronize the clock conversion of NTP time server.
- ≡ Algorithm used SGERG-88 to calculate the gas compressibility factor - can implement any algorithm, calculation.
- ≡ Modular design - each input or output card is equipped with its own set of terminals, allows you to easily change or extension configuration.
- ≡ High quality and reliability, the device is designed and manufactured in accordance with a quality system certified to ISO 9001. Included software "GLOROS XLE Configurator" allows you to: read and write resolver configuration via RS-232, RS-422, RS-485, GSM / GPRS / CSD
- ≡ LAN import and export configuration using storage "Pen Drive".

## Technical parameters

### Power supply:

230V AC, +10%-15% 50Hz -2%  
24V DC +-2V - autonomous power supply

### Current consumption:

< 60W value 230V AC  
< 2,5A value 24V DC

### Dimensions:

90 x 440 x 320 mm  
2U standard 19"

### Masa:

up to 9.7 kg - in full configuration

### Degree of protection:

IP40

### Working temperature:

-10°C to +55°C

### Relative Humidity:

to 93% at +55 °C, non-condensing

### Keyboard:

foil 0.16-to button

### Display:

graphic LCD 240x64 pixels

### EX Label:

EX II (1) G [Ex ia] IIC

### Inputs for meter pulse:

NAMUR pulse,  $U_z = 12V$  2x LF and HF  
and possible co-operation with the output  
reed LF analog input:  
 $4-20\text{ mA}$ ,  $U_z = 20V$ : P and T, REZ1, rez2

### Inputs for analog meter zwięzowego:

$4-20\text{ mA}$ ,  $U_z = 20V$  : 4x delta P, P, T, REZ1, REZ2

### Communication interfaces:

2 x RS-232 data rate to 115200 b / s  
2 x RS-422 or RS-485 data rate to  
115200 b / s LAN 10/100 Mbit / s IEEE  
802.3 and IEEE 802.3u, USB 2.0, length  
connections <3m

