

## VICOR VOLUME CORRECTOR

### Corrector Management Software VISET

VICOR offers standard RS232 and infrared optic port as local communication hardware. ModbusRTU, IEC62056 readout and exclusive IAP (encrypted) protocols are also offered as communication protocol as part of the standard package. Different protocols such as ModbusTCP or hardware RS485 are also available based on client's demands. One of the major features VICOR has is that it can access to IEC62056, Modbus and IAP protocols via all communication ports.. Whole database access and parameter alteration are possible via optic port without opening corrector cover and unsealing. Parameter alteration can be applied with a 6-key functional keyboard without need to a computer.

Optional GSM/GPRS communication modem for remote access significantly decreases the need for complex hardware .VICOR optional modem supports all the GSM communication bands and is compatible to every mobile network and can be used with any of them. External GSM/GPRS, PSTN modem, ethernet modem are among the accesories offered by VICOR.

- > High performance, solid, compatible-to-field work (IP66 certificated)
- > MID legal metrology (EN12405)
- > CE certified in the norms of European Union
- > ATEX approval for dangerous (zone0, zone1, zone2) zone usage
- > Frequently used compressibility algorithms (NX19, AGA8, SGERG)
- > High accuracy measurment (Typical Accuracy: < 0,2%)
- > Long battery life with new technology low power design
- > Optional IO module and RTU featured usage
- > LF and HF volume input
- > Integrated wide communication options ;RS232,RS485 and optic port
- > Autonomous communication with GSM/GPRS module and telemetry
- > Instant notification with cryout function
- > Compatibility to different SCADAs with widened protocol options
- > Graphic LCD screen with LED backlight
- > User friendly screen interface with 6-buttoned keyboard
- > Option to connect additional pressure sensor and temprerature sensor
- > Extensive archive and logging feature

Accredited lab. approval Desired accessories Required language feature

#### SCREEN AND KEYBOARD

VICOR's backlit easy-to-read graphical display allows you to perform a large number of operations, including not only the display of instant data, but also parameter adjustments.



## GAS VOLUME CORRECTOR

VICOR is a T, PT, PTZ type, category 1(\*), electronical volume corrector compatible with international directives. It is a permanent solution for varying needs of gas-distribution companies with its datalogger and advance communication capabilities.

- > Reliable, compatible-to-field-work, high performance design (certificated IP66)
- > MID legal metrology (EN12405)
- > CE certified in the norms of European Union
- > ATEX approval for dangerous (zone0,zone1,zone2) zone usage
- > Frequently used compressibility algorithms (NX19, AGA8, SGERG)
- > High accuracy measurment (Typical Accuracy: < 0,2%)
- > Long battery life with new technology low power design
- > Optional IO module and RTU featured usage
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- > Graphic LCD screen with LED backlight
- > User friendly screen interface with 6-buttoned keyboard
- > Option to connect additional pressure sensor and temperature sensor
- > Extensive archive and logging feature

(\*): the volume corrector has been calibrated with pressure and temperature sensors.



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VICOR Gas Volume Corrector offers different log and archive features due to its large memory.

#### VICOR DATABASE

- > Hourly archive: last 2160 hours (3 months)
- > Daily archive: last 365 days (12 months)
- > Monthly archive: last 120 months (10 years)
- > Incident archives: last 500 incidents, includes parameter updates and critical alarms

#### VICOR IS CAPABLE OF RECOGNIZING AND SAVING DIFFERENT TYPES OF ALARM

- > Measurement pressure (maximum, minimum sensor malfunction)
- > Measurement temperature (maximum, minimum sensor malfunction)
- > Maximum flow
- > Battery status
- > Analog channels (additional pressure/temperature etc)(min,max)
- > Digital Channels (changes in status)
- > Automatic cryout function in case of Station Monitoring Alarm

VICOR offers adjustable digital output options;

- > Uncorrected volume repeat
- > Corrected volume repeat
- > Alarm notification

(\*\*) Available in station

### MEASUREMENT SENSOR

<b>TEMPERATURE SENSOR</b>	PT100 in EN60751 standards - Class A Platinum type resistant thermometer Protective tube suitable for usage in thermowell Up-to 3-meter-long cable length Standard sensitivity < 0,1%measured value
<b>PRESSURE SENSOR</b>	External piezoresistive pressure sensor Up-to 3-meter-long cable length 0-2,5/1-6/5-25/20-80 pressure measurement intervals Standard accuracy < 0,25%, optional accuracy < 0,1% Standard sensitivity < 0,1%measured value
<b>VOLUME INPUT</b>	Maximum 8 Hz LF input Dry Contact or namur
<b>SECONDARY VOLUME INPUT</b>	For monitoring purposes (coherence) LF or optimal HF input LF maximum 8 Hz HF maximum 5 kHz

- > It has been produced with the latest technology for electronics (low power usage = long battery life,
- > high isolation values = endurance to field work,
- > flash memory = large recording capacity,
- > 24bit deltasigma ADC = accurate measurement).

The new technology used enables the equipment to work continually and smoothly with superior performance in the field.

VICOR doesn't only meet the measurement needs of distribution companies but also offers functions that are need for administration and management of networks. Additional digital and analog signals along with measurement parameters is one of the most significant advantages of VICOR.

VICOR is designed to be used in harsh conditions of field applications. VICOR have IP66 certification which guarantees endurance in harsh environment, and ATEX which allows working in dangerous zones.

### TECHNICAL FEATURES / DEVICE FEATURES

<b>MECHANICAL</b>	Enclosure Dimensions: 230 x 140 x 85mm (whd) Approximate Weight: 1,5 kg (including sensors) Enclosure Material: Polycarbonate Protection Class: IP66
<b>SCREEN AND KEYBOARD</b>	Backlighted LCD screen Easy-to-use 6-buttoned keyboard Displaying instant values Adjusting basic parameters on keyboard (protected) Standard language support in Turkish and English Different language support
<b>POWER SOURCE</b>	Battery or external power source 3.6 V, size D, 16 Ah, specific lithium battery Replaceable battery without interrupting work or measurement Minimum 5-year battery life in standard conditions External power source should be "ex" and 6-10 VDC interval
<b>INPUT/ OUTPUT</b>	Additional I/O option for station monitoring 8 digital input 3 analog input(4-20 mA) 4 digital output SSR
<b>COMMUNICATION INTERFACE</b>	RS232 serial communication (varying 9600-57200 bps) IEC62056-21 Optical Port (constant 9600 bps) RS485 Serial communication (varying 9600-57200 bps) Quand Band GSM/GPRS interface(optional) Exclusive IAP ,IEC62056-21 and Modbus RTU/TCP protocol support
<b>MEMORY</b>	Nonvolatile Flash memory 10 years data retention

### METROLOGICAL FEATURES

<b>COMPRESSIBILITY</b>	Aga-8 DC92, Aga NX-19, SGERG Total accuracy : <0,5%( reference value based on EN12405) Typical Total Accuracy : < 0,2% (the measured value) Volumetric Error : None Correction Factor Accuracy : <0,05%
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### CERTIFICATIONS

<b>METROLOGY</b>	EN12405-1/A1 according to European Standards
<b>MID</b>	2004/22/EC in accordance with European measurement standard Module B device certification Module D production process certification
<b>ATEX</b>	Suitable for use in explosive environments under Directive 94/9/EC According to EN60079 II 1/2G Ex (ia) ib IIC T4 Class
<b>MEASUREMENT TEMPERATURE</b>	Between -25°C / +60°C
<b>WORKING TEMPERATURE</b>	Between -25°C / +75°C

