

ELSTER® EK205

Battery-operated Volume Converter for Standard Gas Meter Applications

VOLUME CONVERSION/COMPREHENSIVE DATA LOGGING/ FLEXIBLE DATA COMMUNICATION

The Honeywell Elster EK205 is a battery-operated volume conversion device that can be easily mounted onto gas meters from Elster or other manufacturers. Powered by a lithium battery for a minimum five-year service life, the device calculates gas volume at base conditions on the basis of consumption data supplied by flow-proportional pulses from the connected meter and the measurements of gas temperature and pressure. The EK205 in the version without a pressure sensor can be used as a temperature converter. The data logging function, serial interface and different data communication protocols allow integration in head-end and Supervisory Control and Data Acquisition (SCADA) systems.

TECHNICAL SPECIFICATIONS

Metrological Approval

- MID approval as PTZ, PT and T-Converter
- Conform to EN 12405-1:2011-04

Certifications

- ATEX / IECEx
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Housing, Dimensions & Weight

- Plastic polycarbonate for meter, pipe or wall mounting
- Designed to be easily mounted onto Elster gas meters or other brands
- H 140 mm x W 160 mm x D 88 mm without cable glands
- Approximately 1.3 kg (including battery)

Environmental Conditions

- Ambient Temperature range: - 25° to +55°C
- Ambient Humidity range: 0 to 93% condensing

Protection Class

- IP 65 according to EN 60529

Power Supply Options

- 1 Lithium Battery 3,6 V, capacity: 13 Ah (service life > 5 years under standard operating conditions)
- Optional: External Power Supply 6-9 VDC max. 50 mA

Pressure Sensor

- Type CT30, capacitive ceramic pressure sensors
- Pressure ranges 0.7-2; 0.8-5; 2-10; 4-20; 8-40; 14-70 and 16-80 bar absolute (other pressure ranges on request)
- Connection for precision steel pipe (Ermeto 6L) or flexible pressure tube, M12 x 1.5 thread

Temperature Sensor

- Type Pt-500-four-wire resistance thermometer
- EN 60751, Class A
- Temperature range: -30° to +60°C
- Protective tube for use with thermowell
- Installation length: 50 mm, Ø 6 mm, cable length: 0.7 m or 2.5 m

Communication Protocols

- IEC 62056-21
- DLMS/COSEM (for Software Download)
- Modbus ASCII/RTU/TCP
- Send SMS

(Other communication protocols on request)



FEATURES & BENEFITS

- Meter-, pipe- or wall-mount
- Converted volume calculation according to EN12405
- Compressibility calculation in accordance with AGA-NX19 mod, AGA 8 (GC1 or GC2), AGA 8 DC-92, S-GERG 88, AGA-NX19 or fixed
- Monochrome backlit dot-matrix LCD display, 128 pixels wide, 64 pixels high
- Control panel with 4 buttons
- Two digital inputs
- Two freely programmable transistor outputs (pulses, status)
- Monthly (24 logs), daily (600 logs) and measurement archive (10.000 logs)
- Two flexible archives (content, recording interval and additional events, which cause a record can be configured)
- Logbook (500 logs) and Audit Trail (100 logs)
- Optical interface in accordance with IEC 62056-21 for configuration and local read out
- Integrated RS232/RS485 interface
- Modbus communication in RTU, ASCII and TCP mode
- Software download in accordance with WELMEC 7.2
- enSuite configuration and maintenance software

For more information

To learn more about Honeywell Elster's Gas Solutions, visit www.honeywellprocess.com or contact your Honeywell account manager.

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