WATER LEVEL INDICATOR AND DATALOGGER

Models GEONIVO and GEOLOG

APPLICATIONS

The GEONIVO sensor is designed for free water, borehole or tank water level measurements. This sensor can be read continously and remotely with the use of the field datalogger model GEOLOG.

DESCRIPTION

The GEONIVO uses a pressure-sensitive element from Keller. This element is a micro-machined piezoresistive silicon chip floating in a silicone filling fluid, which gives the sensor excellent long-term stability and very good resistance to vibrations and pressure peaks.

The sensitive element is combined with an electronic module using Keller's ASIC Progress technology. The electronic module has no preset potentiometer and is compound-filled.

The GEOLOG is a small datalogger designed for field applications where data from 1 to 4 sensors are to be logged. Its low power consumption makes it easy to install, with no requirements such as large batteries or power lines. Its memory allows data storage over long periods, diminishing on-site travel costs. The GEOLOG comes with an easy-to-use software allowing scan rate and parameter setting, as well as data transfer.

FEATURES

- **Sturdy overall construction suited for field applications**
- **Barometric compensation with double capillary tubing integrated into signal cable with moisture trap**
- **Current loop output 4–20 mA (2 leads), compatible with most readout units**
- **Field datalogging generating spreadsheet-compatible files**

SPECIFICATIONS

MODEL	GEONIVO
Range	50 to 500 kPa
Accuracy	±0.5% F.S.
Typical	±0.2% F.S.
Long term stability	≤0.2% F.S. / year
Thermal drift	
Zero	≤0.01% F.S. / °C
Sensitivity	≤0.015% F.S. / °C
Signal output	4–20 mA
Power supply	8–28 VDC
Thermistor	3 kΩ (see model TH-T)
Self-compensation temperature range	–10 to +80°C
Material	316 stainless steel
Transducer	Piezoresistive relative pressure transducer with current loop signal 4–20 mA, 2 wires
Filter	Stainless steel, ~50 kPa, ~10 kPa low air entry Ceramic, ~1 µm, ~450 kPa high air entry
Humidity control	Moisture trap
Cable	IRC-41AV
Dimensions	28.6 mm OD
Length	200 mm
Weight	0.9 kg

MODEL	GEOLOG
Range	4–20 mA signal
Accuracy	±5 µA
Resolution	0.5 µA
Processor	16 bits
Power supply	12 V
Channel	1 (standard), 2 or 4 (optional)
Memory	Up to 64 kb per channel (8 kb standard) EEPROM equivalent to 1000 to 16 000 measurements
Interfacing	RS-232
Batteries	Two 1.5 Volt, alkaline, type C
Autonomy	Depends on number of channels (typically 3 months with one channel and one reading per hour)
Case	Watertight (1 m), shock resistant, ABS, 160 × 100 × 60 mm

ORDERING INFORMATION

Please specify:

- Range
- Cable length
- Readout instruments

E50232-061020