MSB182

Digital Barometer

Barometer MSB182, developed and manufactured by MicroStep-MIS, is designed for use in meteorological and agrometeorological applications requiring accurate measurement.





Digital output

Accuracy ±0.3 hPa

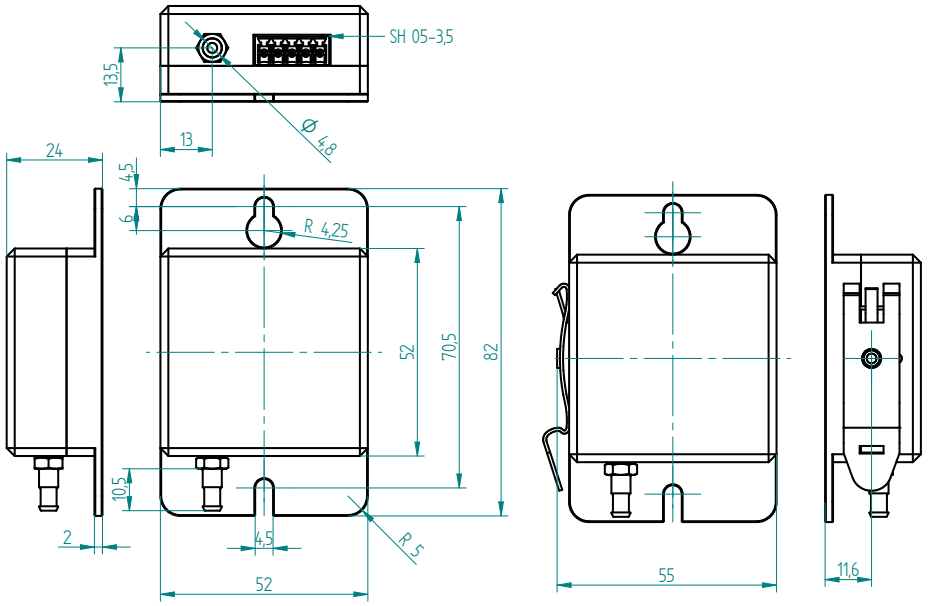
Fully temperature compensated

Long-term stability ±0.2 hPa / year



MSB182 provides three interfaces - SDI-12, RS485 and analog output. Supply current is less than 6 mA at 12 V. The version with SDI-12 features 50 µA sleep mode. Time to first sample less than 1 s can be achieved with RS-485 and analog versions.

MSB182 is temperature compensated from –40 °C to +60 °C. The power supply range is from 6 to 16 V DC. The barometer weighs 135 g. A fitting for 4.6 mm internal diameter tube is used for pressure connection. The device has an integrated sintered filter preventing the dust to enter the barometer measuring cell. MSB182 comes factory calibrated with a manufacturer calibration certificate.



Dimensions in millimeters

Operating range

Pressure range	500 - 1100 hPa
Temperature range	–40 °C to +60 °C
Storage temperature	–40 °C to +60 °C
Upgrade to ISO 17025 accredited calibration	optional

General

Supply voltage	6 - 30 V DC
Current consumption (active)	6 mA nominal (@12 V)
Current consumption (idle)	50 uA typ.*
Wake-up from sleep mode	< 1 s
Pressure fitting	fitting 4.6 mm
Minimum pressure limit	0 hPa
Maximum pressure limit	1500 hPa
Measurement principle	piezoresistive transducer
Output options	SDI-12, RS-485, 2.5 V analog (configurable)
Weight	135 g / 55 g (DIN version)

**Available in SDI-12 version only*

Accuracy

Accuracy	±0.3 hPa
Long-term stability	±0.2 hPa / year

Factory calibration

Typical uncertainty U	0.15 hPa

All specifications are subject to change without prior notice.
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