

BARANIDESIGN

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Affordable WMO Accuracy Barometric Pressure Sensor

- Digital output
- · Temperature compensated output
- · ±0.3 hPa accuracy
- Long-term stability ±0.2 hPa / year



MeteoPressure MSB181

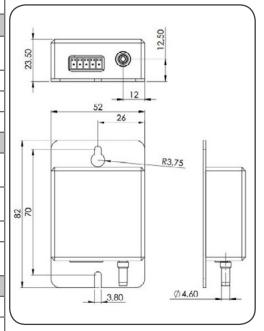
Precision barometric pressure sensor designed for meteorological weather station applications which require accurate & reliable measurement with good longterm stability. Temperature compensated output ensures accurate pressure sensing even in extreme environments.

Available with SDI-12, RS-485, RS-232 or analog 0 to 2.5 V output and factory calibration certificate.

High absolute pressure accuracy & connector connection for easy on-site service

Precision & Accuracy	
Accuracy	±0.3 hPa (6001100 hPa)
Resolution	0.01 hPa
Long-term stability	±0.2 hPa / year
Electrical specifications of sensor	
Output signal & communication	RS-485 also available: 0-2.5V, RS232, SDI-12)
Supply Voltage	615VDC (startup in-rush <200mA for 5ms
Power consumption	7mA at 12V (including 1/sec RS485 communication)
Environmental rating of sensor	
Operating temperature & humidity range	-40°C to +60°C 0% to 95%RH
Operating Pressure range	01500 hPa (0 to 1.5 atm)
Connection	Removable 5-pin screw terminal block
IP - Protection rating	IP53W (DIN 40050) Available in IP66 upon request
General specifications	
Sensor type	Piezoresistive
Weight (mass)	aprox. 135g (without mating connector and cable)

Removable 5-pin terminal block enables **easy on-site service**. The 4.6 mm pressure fitting with integrated **sintered dust filter** protects the barometer sensing element from dust and dirt.



 $[\]star$ Accuracy of 0.3 hPa = 0.3 millibar (mb) = 0.0088 inHg Standard unit conversions: 1.0 atm = 29.92 "Hg = 29.92 inHg = 760 mmHg = 760 torr = 14.6959 psi SI unit conversions: 1.0 atm = 1013.25 hPa = 1013.25 mb = 101.325 kPa = 0.101325MPa

For meteorological weather station AWS & AWOS applications where WMO accuracy and reliability is important

AFFORDABLE PRESSURE ACCURACY

Mechanically strong, low power, dust protection and designed for easy service.

