



Digital Barometer MSB780X is designed for use in professional meteorological and aviation applications that require reliable and highly accurate measurement, fast dynamic response, and advanced long-term stability.

KEY FEATURES & BENEFITS

- Excellent total accuracy 0.15 hPa
- Typical long-term stability better than 0.05 hPa / year
- Fast dynamic response
- Fully temperature compensated
- Digital output
- 1 to 3 transducers

The Digital Barometer MSB780X is built to withstand even the most challenging environmental conditions, which are often encountered in environmental monitoring applications.

Barometer MSB780X is a low power consumption microprocessor controlled sensor suitable for solar and battery powered applications. The barometer is operable in temperature range from -50°C to +80°C. The operating voltage range is from 5 to 32 V dc.

The robust product is made of durable materials and uses a heavy duty metal IP66 enclosure. This barometer comes fully factory calibrated with a manufacturer calibration certificate.

The MSB780X uses premium quality transducers. One, two or three transducers are available for high reliability, fault tolerant systems. An optional touch screen display is available.

MSB780X

Digital Barometer

Specifications



Performance

Barometric pressure range	500 hPa to 1100 hPa (or as specified)
Linearity	< 0.02 hPa
Hysteresis	< 0.02 hPa
Accuracy @ 23°C	0.10 hPa
Total accuracy	0.15 hPa (-50°C to +80°C)
Typical long-term stability	Better than 0.05 hPa / year

Operating Environmental

Pressure range	500 hPa to 1100 hPa
Temperature range	-50°C to +80°C
Relative humidity	(0) To 100) % (RH)
Overpressure limit	4000 hPa (not affecting sensor calibration)
Burst pressure limit	7000 hPa
Enclosure	IP66

Inputs and Outputs

Supply voltage	5 to 35 V dc
Power supply current	32 mA @ 12 V dc (1 sensor, without display)
Resolution	0.001 hPa
Communication	RS-232
Number of transducers	1 to 3

Models

Ref No.	Description	Power Supply Current
MSB780X1	1 pressure sensor, no display	32 mA @ 12 V dc
MSB780X2	2 pressure sensors, no display	64 mA @ 12 V dc
MSB780X3	3 pressure sensors, no display	96 mA @ 12 V dc
MSB780X1D	1 pressure sensor, touchscreen display	35 mA @ 12 V dc
MSB780X2D	2 pressure sensors, touchscreen display	67 mA @ 12 V dc
MSB780X3D	3 pressure sensors, touchscreen display	99 mA @ 12 V dc