

SPECIFICATIONS

BP20 Barometric Pressure Sensor

FEATURES

- High level linear voltage output
- Full-span or half-span output option



The NRG #BP20 barometric pressure sensor is a micro-machined absolute pressure sensor which provides a high level voltage output signal that is proportional to absolute pressure. It includes built-in temperature compensation, linearization, and an output amplifier.

Its low cost and rugged PVC enclosure make the BP-20 ideal for collecting absolute pressure data at remote sites.

SPECIFICATIONS

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| Description | Sensor type | micro-machined integrated circuit absolute pressure sensor |
| | Applications | <ul style="list-style-type: none"> • wind resource assessment • meteorological studies • environmental monitoring |
| | Sensor range | 15 kPa to 115 kPa (4.43 inches to 34.0 inches Hg) |
| | Instrument compatibility | <ul style="list-style-type: none"> • NRG Symphonie equipped with a BP SCM + any iPack • any NRG 9300SA, NRG 9300CL or 9300TL equipped with a TPRH SIM card + PV/battery |
| Output signal | Signal type | linear analog voltage |
| | Transfer function | Absolute Pressure in kPa = (Voltage x 21.79) + 10.55 typical |
| | Accuracy | +/- 1.5 kPa max. uncorrected offset (+/- 0.443 inches Hg) |
| | Calibration | calibration sheet included with each sensor specifies offset correction |
| | Turn on time | 15 ms |
| Power requirements | Supply voltage | 7 V to 35 V DC |
| | Supply current | 15 mA max. (8 mA typical) |
| Installation | Mounting | mounts directly to tower or inside steel shelter box with hose clamps (included) |
| | Tools required | 5/16 inch hex driver or flat blade screwdriver |



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| Physical | Connections | wire leads: <ul style="list-style-type: none">• signal (green wire)• ground (black wire)• excitation (red wire)• half-span signal (white wire)• shield wire for earth ground |
| | Cable length | <ul style="list-style-type: none">• 1.5 m (5 feet)• cable diameter 4.8 mm (3/16 inches) |
| | Weight | 0.1 kg (0.2 pounds) |
| | Dimensions | <ul style="list-style-type: none">• 57 mm (2.25 inches) diameter• 112 mm (4.4 inches) length (including cable bushing) |
| Materials | Cable | 4 conductor 22 AWG, with overall foil shield and drain wire, chrome PVC jacket |
| | Enclosure | weatherproof PVC |



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