

Pressure transducer BR2W



Features

- Wi-Fi Communication 2.4ghz IEEE 802.11 18bits Resolution
- Battery consumption management
- High Resolution Load Measurements
- Fast Calibration Method
- Web Based Platform
- Full Bridge Balancing Measurement
- Wide Range Applications
- HART communication
- TCP/IP Wi-Fi protocol

Applications

- Pressure measurement
- DAQ- Data Acquisition Systems
- Remote Wi-Fi Data Transferring and SAP Integration
- Data logger – Tracking Record with customized Report
- Industrial Process Control
- Analog Sensors Interface
- Digital Sensor Interface

Functional Description

BR2W has develop a unique solution for pressure monitoring. The solution aims to solve industrial problems in pressure monitoring, with versatility and robustness.

The pressure transducer uses the Wi-Fi Electronic System BR2W board. With the board usage, the equipment generates a Wi-Fi signal, what makes possible to connect the pressure reading to any electronic device that supports Wi-Fi connection. Also, the BR2W board solution versatility allows the generated Wi-Fi signal to be integrated in any local network.

The sensor has a measurement range from 0 ... 0.4 to 0 ... 1600 bar (0 ... 10 to 0 ... 20000 psi) with high precision and reliability. Non-linearity until 0.125 % from span.

The equipment has a robust design. It was made to work in high standard, even in advert conditions; as extreme temperature and hostile weather

condition. Also, the transducer was designed to resist impact and advert vibration level.

Technical Specifications

Measurement Range

Gauge Pressure

bar	0 ... 0,4	0 ... 0,6	0 ... 1	0 ... 1,6	0 ... 2,5	0 ... 4	0 ... 6
	0 ... 10	0 ... 16	0 ... 25	0 ... 40	0 ... 60	0 ... 100	0 ... 160
	0 ... 250	0 ... 400	0 ... 600	0 ... 1.000	0 ... 1.600		
psi	0 ... 10	0 ... 15	0 ... 25	0 ... 30	0 ... 50	0 ... 60	0 ... 100
	0 ... 150	0 ... 160	0 ... 200	0 ... 250	0 ... 300	0 ... 400	0 ... 500
	0 ... 600	0 ... 750	0 ... 1000	0 ... 1500	0 ... 2000	0 ... 3000	0 ... 4000
	0 ... 5000	0 ... 6000	0 ... 7500	0 ... 10000	0 ... 15000	0 ... 20000	

Absolute Pressure

bar	0 ... 0,4	0 ... 0,6	0 ... 1	0 ... 1.6	0 ... 2.5	0 ... 4	0 ... 6
	0 ... 10	0 ... 16	0 ... 25	0 ... 40			
psi	0 ... 10	0 ... 15	0 ... 25	0 ... 30	0 ... 50	0 ... 60	0 ... 100
	0 ... 150	0 ... 160	0 ... 200	0 ... 250	0 ... 300	0 ... 400	0 ... 500

Output Signal

Current output (4 wires) - Hart Optional	4 ... 20 mA
Wi-Fi Communication 2.4ghz IEEE 802.11 18bits Resolution	Client mode or access point

Power supply

The power supply for on kinds of outputs signal is 5 V. Battery last for 20 hours on continues running.

Operation condition

In order to cover a considerable amount of industrial applications, the transducer can work on advert conditions, and the current section has the goal to show the equipment's limitation.

In a context of temperature range of operation, the standard range for medium and ambient temperature is from – 30 to + 100 °C. Also, some care has to be taken during transportation, where it is allowed a temperature from – 40 to+70 °C.

If vibration is a problem, the equipment has an acceleration threshold level of 20 g, for a frequency from 10 to 2000 Hz.

For an impact situation, it resists an acceleration of 100 g that occurs in 6 ms.

The transducer lifetime is 100 million load cycles.

Technical Dimensions (mm)

