



**APPLIED MEASUREMENTS LTD.**  
Transducer Specialists...

+44 (0) 118 981 7339

[info@appmeas.co.uk](mailto:info@appmeas.co.uk)

<https://appmeas.co.uk/>

## B24-SSB Bluetooth Strain Gauge Transmitter

### Key Features:

- Instant Data Visualisation with Phone or Tablet
- Wide Sensitivity Inputs: +/- 6mV/V, +/- 12 mV/V, +/- 24 mV/V, +/- 48mV/V
- Single and Multiple Transmission Options
- Transmission Range up to 90m
- 16.5-Bit Noise-Free Resolution
- IP67 Enclosure or OEM Board Options
- 3 Years Warranty



The B24-SSB bluetooth strain gauge transmitter provides instant data transmitted by Bluetooth to a mobile platform such as a mobile phone or tablet. The data is transmitted by Bluetooth Low Energy maintaining the low power requirements of Bluetooth embedded systems.

One Bluetooth transmitter can be used to transmit data to multiple or single mobile platforms or multiple Bluetooth transmitters can be used to transmit to a single device or multiple mobile devices.

It has four sensitivity input options to work with a range of sensors. They are +/- 6mV/V, +/- 12 mV/V, +/- 24 mV/V, +/- 48mV/V. Plus, it comes with a 16.5-Bit noise-free resolution of 1 in 92,000 counts when used with a 3mV/V sensor or a 17.5-bit noise-free resolution when used with a 6mV/V sensor (1 in 184,000 counts).

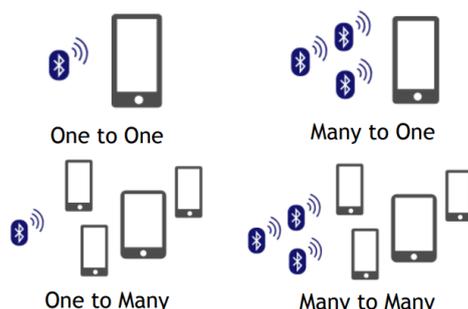
Thanks to its 30m to 90m line-of-sight range, it is ideal to use in most applications. Transmission range does depend on the performance of the viewing device (tablet or phone).

The B24-SSB comes with 2 options:

- B24-SSBC - comes housed within an IP67 waterproof and dustproof enclosure which includes an integrated battery holder.
- B24-SSBX - is a board only format enabling integration into OEM applications.

The free downloadable software for Android and iOS enables the user to create dashboards tailored to your application needs and visualisation of the data on mobile phones and tablets. The data displayed can be from multiple or single setups with mathematical expressions, functions and constants and also allows configuration and calibration.

Configuration PIN, View PIN and Calibration PIN delivers advanced protection against any unwanted or accidental changes.





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## Industries:

- Civil Engineering
- Lifting & Handling
- Waste Management
- Alternative Energy
- Construction
- Automotive
- Silo & Weighing Industry
- Marine

## Applications:

- Wireless Truck Load/Weight Monitoring
- Wireless Skip Weighing System
- Wireless Platform Weighing
- Local Barometric/Atmosphere Pressure Monitoring
- Force Measurement in Formula Racing
- Wireless Silo Weighing
- Superyacht Sail-Track Development
- Telemetry Monitoring on High Altitude Roads
- Radio Telemetry Monitoring of Underwater Turbine
- Wireless Mooring Rope Monitoring
- Wireless Valve Control
- Torque Measurement Using Wireless Technology
- Liquid Level Checking

## Specification:

Parameter	
Strain Gauge Excitation System	4-wire
Strain Gauge Excitation Voltage (Nom)	3Vdc
Strain Gauge Drive Capability	85 to 5000 ohms
Strain Gauge Sensitivity	Up to $\pm 48\text{mV/V}$
Offset Temperature Stability	$\pm 5\text{ ppm / }^\circ\text{C}$
Gain Temperature Stability (Max)	$4\text{ ppm / }^\circ\text{C}$
Non Linearity before Linearisation	$6\text{ ppm of FR}$
Internal Resolution	24 bits
Noise-Free Resolution at $2.5\text{mV/V}$ :	
At 1 sample	14.25 bits
At 2 samples	15.25 bits
At 4 samples	16.00 bits
At 8 samples	16.75 bits
Battery Life at 1 Sample per Second	
2 x AA cells, transmitting 24 hours / day	10 months
Power Supply	
Standby (Max)	$10\ \mu\text{A}$
Power Supply Voltage	2.3 - 3.6 Vdc
Power Supply Ripple	$50\text{ mV ac pk-pk}$
Peak Current (1K Bridge)	$30\text{ mA}$
Environmental	
Operating Temperature Range	$-40\text{ to }+85\text{ }^\circ\text{C}$
Storage Temperature Range	$-40\text{ to }+85\text{ }^\circ\text{C}$
Maximum Humidity	Up to 95% non condensing
Protection (Enclosure Only)	IP67



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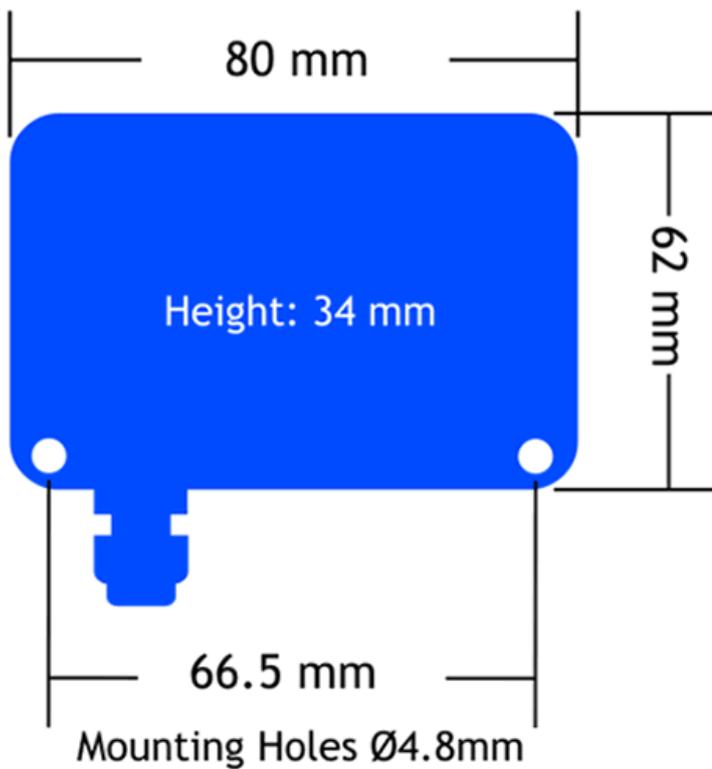
<https://appmeas.co.uk/>

## Ordering Codes:

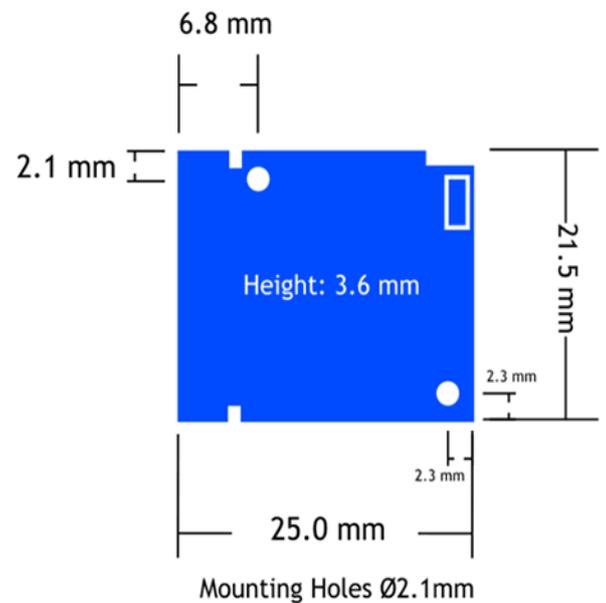
B24-SSBC	Bluetooth Strain Gauge Transmitter in IP67 Enclosure
B24-SSBX	Bluetooth Strain Gauge Transmitter OEM Board Only

## Dimensions (mm):

**B24-SSBC**



**B24-SSBX**



## Associated Products:



[T24 Wireless Instrumentation](#)



[X24 ATEX Wireless Instrumentation](#)