



## MBB-2

### Miniature 120s BroadBand Seismometer

The Mini BroadBand Seismometer (MBB-2) is the latest sensor offering from Metrozet for vault or posthole installations. The MBB-2 offers high performance features in a small, rugged, low power and low cost system that is easy to install and deploy. Built with ease of installation in mind, the MBB-2 does not require mass lock, mass centering, and has a large operational tilt range which reduces installation time. The MBB-2 was engineered from the ground up to deliver best-in-class performance.

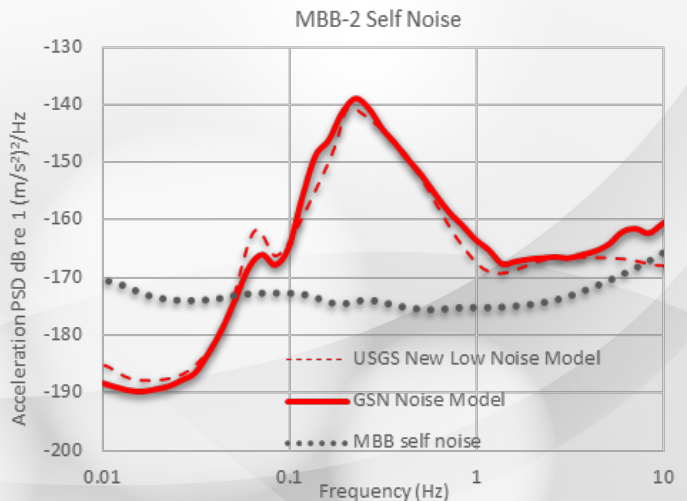
#### FEATURES

- No mass lock required
- No mass centering required
- Small, portable, 120 second broadband sensor
- Large operational tilt range
- Stainless steel housing rated IP68 with oceanographic-grade connector
- Noise that is below the NLNM from 20 seconds to 8 Hz

#### SPECIFICATIONS

<b>Sensor Technology</b>	Triaxial orthogonal, XYZ oriented feedback sensor elements with capacitive displacement transducer
<b>Sensitivity</b>	750 V/(m/s) nominal, trimmed to $\pm 0.5\%$ precision
<b>Bandwidth</b>	-3 dB points at 120 seconds and 160 Hz
<b>Operable Tilt Range</b>	$\pm 2.5$ Degrees
<b>Dynamic Range:</b>	155 dB at 1 Hz
<b>Clipping Level:</b>	26 mm/s peak from 0.0083 Hz to 40 Hz; proportional to $1/f$ above 40 Hz, reaching 10 mm/s at 100 Hz; proportional to $1/f^2$ below 0.0083 Hz
<b>Velocity Output</b>	Industry standard 40 V peak-to-peak differential output
<b>Mass Position Output</b>	Independent mass position output for each of the XYZ axes
<b>Calibration</b>	Calibration input for XYZ components; single digital control line to activate calibration on all three axes
<b>Short Period Mode</b>	1sec mode used for quick deployment; digital control line enables short period mode on all three axes
<b>Voltage Input</b>	9-36 V DC input (internally isolated)
<b>Electrical Protection</b>	Over-voltage, reverse-voltage, and current overload protection
<b>Galvanic Isolation</b>	Power input and digital control lines (setup mode and calibration enable lines have independent galvanic isolation)

<b>Operational Temperature</b>	-40 to +60 °C
<b>Power Consumption</b>	240 mW
<b>Posthole Orientation</b>	Yoke adapter and orientation poles available
<b>Physical Dimensions</b>	Height: 4.75 inches (11.4 cm) (sensor body excluding connector height) Diameter: 3.875 inches (9.8 cm) Weight: 4.5 pounds (2 kg)



Specifications subject to change without notice