# metrozet

A Kinemetrics Division



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.

### SPECIFICATIONS

Sensor Technology Triaxial orthogonal, XYZ oriented

feedback sensor elements with capacitive displacement

transducer

Sensitivity 750 V/(m/s) nominal, trimmed to

± 0.5% precision

Bandwidth -3 dB points at 120 seconds and 160 Hz

Operable Tilt Range ± 2.5 Degrees

Dynamic Range: 155 dB at 1 Hz

**Short Period Mode** 

**Electrical Protection** 

Clipping Level: 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/ f² below 0.0083 Hz

Velocity Output Industry standard 40 V peak-to-peak

differential output

Mass Position Output Independent mass position output for each

of the XYZ axes

Calibration Calibration input for XYZ components; single

digital control line to activate calibration on

all three axes

enables short period mode on all tr

enables short period mode on all three

axes

Voltage Input 9-36 V DC input (internally isolated)

Over-voltage, reverse-voltage, and

1sec mode used for quick

deployment; digital control line

current overload protection

Galvanic Isolation

Power input and digital control lines

(setup mode and calibration enable lines have independent qalvanic isolation)

### MBB-2

## Miniature 120s BroadBand Seismometer

#### **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

**Operational Temperature** -40 to +60 ℃

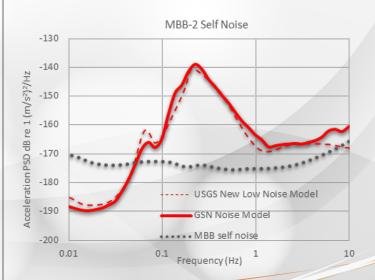
Power Consumption 240 mW

**Posthole Orientation** Yoke adapter and orientation poles available

Physical Dimensions Height: Sensor Body and Connector: 5.44 inches (13.8 cm)

Including Fixed Feet: 5.67 inches (14.4 cm)

Diameter: 3.875 inches (9.8 cm) Weight: 6.5 pounds (2.95 kg)



Specifications subject to change without notice

Kinemetrics - 222 Vista Ave. Pasadena, CA Tel (626)795-2220 Lwww.kinemetrics.com