



# TELLUS-BB

## Broad band seismometer

### High Performance triaxial broad-band seismometer.

Tellus-BB is a high quality broad-band triaxial seismometer designed for easy deployment and safe transport. Tellus-BB is based on Galperin configuration which allows to more easily distinguish external noise sources from internal ones and achieve higher performance.

Tellus-BB can be ordered with a flat band-pass between 200s-30s and 100Hz. The lower frequency corner can be customized at the order.

The standard transduction factor is 1500V/m/s, but it can be customized when ordering. The output is differential 40Vpp.

Tellus-BB is manufactured in aluminum (surface treatment) housing offering a high level of protection IP68K making it ideal for harsh environment and for field use.

Tellus-BB is robust magnetic shielded and exhibits a low temperature sensitivity.

DYNAMIC RANGE > 160dB at 1 Hz

FREQUENCY RANGE 200s-30s ÷ 100 Hz

TRANSDUCTION FACTOR 1500V/m/s

HIGH ACCURACY

LOW SELF-NOISE

GOOD THERMAL STABILITY

LOW POWER

ROBUST

PRECISION FACTORY CALIBRATION

National Seismic Networks / Site Response  
Regional and Tele-seismic Events / Magnitude Estimation  
Restitution of ground displacement / Event Detection and Location  
Volcano eruption / Early Warning

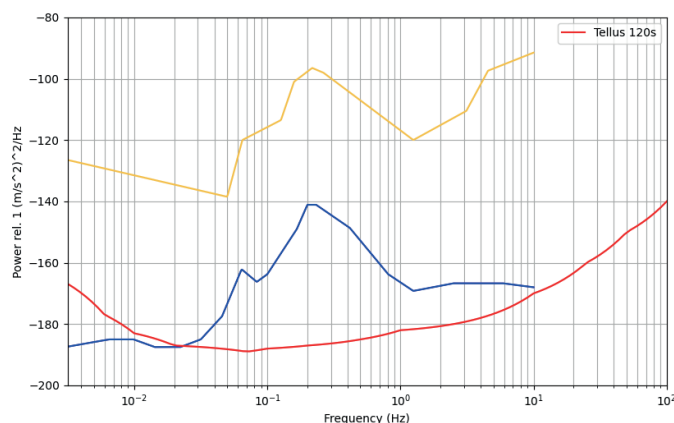
**TIPOLOGY** Galperin arrangement, Force feedback capacitive transducer  
**VELOCITY OUTPUT XYZ** XYZ (H and V motion) or UVW (masses motion)  
**BANDWIDTH** 200-30s to 100 Hz (customizable)  
**DYNAMIC RANGE** > 160dB @ 1 Hz  
**TRANSDUCTION FACTOR** 1500V/m/s (customizable)  
**SELF NOISE** < USGS NLNM between 0.02 to 25Hz  
**OUTPUT** Velocity differential 40Vpp XYZ Mass position Single 10Vpp  
**CLIP LEVEL** 26mm/s (13mm/s)  
**TILT TOLERANCE** +/- 3°  
**OUTPUT IMPEDANCE** 2x100 Ohm  
**CALIBRATION** Via dedicated calibration coils (analog test signals)  
MASS LOCKING and CENTERING Auto, via Control Lines or RS232

**CONNECTORS** MIL-STD 26 pin male  
**DIGITAL INTERFACE** RS232 commands and diagnosis  
**CONTROL LINES** GPIOs and Analog Outputs

**SUPPLY VOLTAGE** 9 to 40 V DC isolated input  
**POWER CONSUMPTION** 33mA@12V  
**PROTECTION** Reverse-voltage, overvoltage and surge-protected Isolation  
**GROUNDING** Predrilled hole  
**REGULATION** CE compliance

**OPERATING TEMPERATURE** -20°C to +70°C  
(+/-25°C without recentering)  
**STORAGE TEMPERATURE** -40°C to +80°C  
**HUMIDITY** 0 to 100%  
**WEATHER RESISTANCE** IP68K

**HOUSING** aluminum surface treatment  
**LEVELING** Integrated leveling bubble and adjustable locking leveling screws for spikes  
**OD** 230 mm  
**HEIGHT** 254 mm  
**WEIGHT** 16 kg  
**CABLE** 3m or custom  
**SHOCK** MIL STD 810G



Version with top connectors

TELLUS-BB-30s  
TELLUS-BB-60s  
TELLUS-BB-120s  
TELLUS-BB-180s  
TELLUS-BB-200s