



TELLUS-1s

SHORT BAND SEISMOMETER

KEY FEATURES

DYNAMIC RANGE > 140dB

FREQUENCY RANGE 1Hz ÷ 100 Hz

TRANSDUCTION FACTOR 400V/m/s (S)
800V/m/s (D)

HIGH ACCURACY

LOW SELF-NOISE

GOOD THERMAL STABILITY

LOW POWER

ROBUST

NO NEED FOR MECHANICAL CLAMPING

High quality 1 second short band seismometer.

Tellus 1s provides great results for local seismic monitoring with an excellent price-performance ratio. Tellus 1s is manufactured using high quality geophones whose frequency response is extended electronically with high thermal stability and low noise components. The transduction factor of every single unit is individually calibrated on the shake table with an accuracy within $\pm 1\%$.

Tellus 1s exhibits a flat bandpass between 1Hz and 100Hz. The transduction factor of the single ended version is 400V/m/s and 800V/m/s for the differential output.

Tellus 1s is manufactured in AISI316 stainless steel housing offering a high level of protection IP68 thus it is ideal for harsh environment and for field use. An aluminum hard coated housing variant is available as a budget version when a rugged version is not needed.



Local seismicity
 Induced seismicity
 Nakamura
 Volcano monitoring

APPLICATIONS

TIPOLOGY Triaxial

BANDWIDTH 1Hz to 100 Hz -3 dB point

DYNAMIC RANGE > 140dB

TRANSDUCTION FACTOR 400V/m/s single ended or 800V/m/s differential

NOISE @ 1HZ < 3nm/s

PERFORMANCE

CONNECTORS 62GB-12E12-10SN, 10-pin

VELOCITY Output 14Vpp single-ended or differential

OUTPUT IMPEDANCE 2 x 100 Ω

TEST INPUT active low

INTERFACE

SUPPLY VOLTAGE 5 to 40 V DC isolated input

POWER CONSUMPTION 10mA@12V

PROTECTION Reverse-voltage, overvoltage and surge-protected Isolation:
 Supply power is isolated from signal ground

GROUNDING Predrilled hole

POWER SUPPLY

OPERATING TEMPERATURE -20°C to +70°C

STORAGE TEMPERATURE -40°C to +80°C

HUMIDITY 0 to 100%

WEATHER RESISTANCE Rated to IP68

OP. CONDITIONS

HOUSING AISI 316 stainless steel or aluminum hard coating anodize

LEVELING Integrated leveling bubble and adjustable locking leveling screws for spikes

OD 100mm

HEIGHT 99,4mm

WEIGHT 2300 g (AISI), 900g (Al)

CABLE 3m or custom

PHYSICAL

