

Shallow Posthole Seismometer: Model F72-2.0

Easily installed
seismometer for
micro-earthquake
monitoring.

The F72-2.0 is IESE's **readily deployed** shallow posthole sonde for use in micro-earthquake detection and analysis. The standard model F72-2.0 is designed for installation in **up to 50 m** vertical holes with a specialized option for use to **100 m**. All three orthogonal components are fixed. The F72-2.0 represents a low cost compromise if the conditions are applicable. An alternate model, the F72-4.5 offers a higher tilt tolerance in exchange for a higher corner frequency.

Features

- Fixed geophones
- Withstands up to 100 °C (frequency changes > 50 °C)
- Passive sensors
- For permanent or temporary installations
- Custom versions can include accelerometers, magnetometers etc.



Geophone parameter

Geophone parameter	Specification
Sensor configuration	Triaxial, Orthogonal
Natural frequency	2.0 Hz
Operational temperature	-45 °C to +100 °C
Geophone tilt tolerance	Vert. ± 7.5°, horiz. ± 0.5°
DC resistance	3,810 Ω
Sensitivity	0.787 V/cm/s (2.0 V/in/s)
Transduction constant	0.0126 √Rc V/cm/s (0.032 √Rc V/in/s)
Open circuit damping	0.61
Moving mass	23 g
Max coil excursion p-p	0.76 cm (0.300 in)

Housing parameter

Housing parameter	Standard model
Operational pressure	0.55 MPa (80 psi)
Outer diameter	72 mm (2.8 in)
Wall thickness	2.5 mm (0.1 in)
Height	315 mm (12.4 in)
Weight	11 kg (24 lbs)
Casing material	316L stainless steel

For more information, please email us at enquiries@iese.co.nz, phone +64 9 354 4224, or visit <http://www.iese.co.nz>.