



Advanced Seismic Instrumentation & Research

AF15

P/N 100019



MidLine fixed omni-directional 15 Hz deep borehole seismometer

The AF15 is ASIR's newest readily deployed deep borehole 3-component instrument for use in microearthquake detection and monitoring. It is designed for up to 3000 m depths with each component consisting of three single sensors connected in series. It features the highest current performance level in sensitivity, reliability, and longevity.



Features

- > slim 61 mm outer diameter (OD)
- > passive sensors
- > omni-directional
- > for permanent or temporary installations

Sensor Parameters

Coil Resistance	4350 Ohms $\pm$ 5 %
Depth Range	0 - 3000 m
Distortion	< 0.2 %
Max Motion p-p	4.06 mm
Moving Mass	39.6 g
Natural Frequency	15 Hz $\pm$ 10 %
Damping	0.62 $\pm$ 10 %
Operating Temperature	-40 to +100 °C
Sensitivity	216 V/m/s $\pm$ 10 %
Sensor Type	3 component - fixed
Tilt Tolerance	omni-directional

Sonde Dimensions

Height	1020 mm
Outer Diameter	61 mm
Weight	10 kg

Cable

Delivered standard with 3 twisted shielded pairs, 400 kg Kevlar core, non-armored. Can be supplied with cable to meet customer specified requirements and length.



Advanced Seismic Instrumentation & Research

AF15

P/N 100022



MidLine fixed omni-directional 15 Hz deep borehole seismometer

The AF15 is ASIR's newest readily deployed deep borehole 3-component instrument for use in microearthquake detection and monitoring. It is designed for up to 3000 m depths with each component consisting of three single sensors connected in series. It features the highest current performance level in sensitivity, reliability, and longevity.



Features

- > slim 61 mm outer diameter (OD)
- > passive sensors
- > omni-directional
- > for permanent or temporary installations

Sensor Parameters

Coil Resistance	7200 Ohms $\pm$ 5 %
Depth Range	0 - 3000 m
Distortion	< 0.75 %
Max Motion p-p	3.05 mm
Moving Mass	23.4 g
Natural Frequency	15 Hz $\pm$ 10 %
Damping	0.70 $\pm$ 10 %
Operating Temperature	-40 to +100 °C
Sensitivity	130 V/m/s $\pm$ 10 %
Sensor Type	3 component - fixed
Tilt Tolerance	omni-directional

Sonde Dimensions

Height	1020 mm
Outer Diameter	61 mm
Weight	10 kg

Cable

Delivered standard with 3 twisted shielded pairs, 400 kg Kevlar core, non-armored. Can be supplied with cable to meet customer specified requirements and length.



Advanced Seismic Instrumentation & Research

AF15

P/N 100024



MidLine fixed omni-directional 15 Hz deep borehole seismometer

The AF15 is ASIR's newest readily deployed deep borehole 3-component instrument for use in microearthquake detection and monitoring. It is designed for up to 3000 m depths with each component consisting of four single sensors connected in series. It features the highest current performance level in sensitivity, reliability, and longevity.



Features

- > slim 61 mm outer diameter (OD)
- > passive sensors
- > omni-directional
- > for permanent or temporary installations

Sensor Parameters

Coil Resistance	9600 Ohms $\pm$ 5 %
Depth Range	0 - 3000 m
Distortion	< 0.75 %
Max Motion p-p	3.05 mm
Moving Mass	31.2 g
Natural Frequency	15 Hz $\pm$ 10 %
Damping	0.70 $\pm$ 10 %
Operating Temperature	-40 to +100 °C
Sensitivity	173 V/m/s $\pm$ 10 %
Sensor Type	3 component - fixed
Tilt Tolerance	omni-directional

Sonde Dimensions

Height	1020 mm
Outer Diameter	61 mm
Weight	10 kg

Cable

Delivered standard with 3 twisted shielded pairs, 400 kg Kevlar core, non-armored. Can be supplied with cable to meet customer specified requirements and length.