



[PDF NDAS Software User Manual](#)

[PDF NDAS WEB Interface User Guide](#)

Seismometer CME-6111ND

CME-6111ND is a digital 3-component low-noise broadband seismometer with a force feedback. A bandwidth of up to 60 sec provides recording of the most remote seismic events.

This seismometer combines the low-noise molecular-electronic sensing element (transducer) and the electrodynamic feedback that result in a very flat response over a wide frequency range, a high dynamic range and a greatly improved time and temperature stability of the parameters.

This model is very rugged and does not require any special means or procedures for transportation and installation. The only procedure to start the operation is to place the seismometer on a rigid horizontal surface, turn the power on and wait for several minutes.

This seismometer can be used in various applications such as seismic observatories, seismological surveys, seismic microzoning and passive broadband seismic exploration.

Characteristics

[Delivery and warranty >](#)

Frequency range	0.016 Hz (60 sec) - 50 Hz
Sensitivity	2000 V / (m/sec)
Clip level	7.5 mm/sec
Self noise at 1 Hz	1.4 nm/sec (2.8 μ V)
Dynamic range	137 dB at 1 Hz
Nonlinearity	0.2 %
Sensitivity axes	Vertical, North, East
Supply voltage	12 V Nominal (9-16 V permissible)
Power consumption	< 1 W
Temperature range	-40°C - +85°C - industrial SD-card
ADC sampling rate	1, 10, 50, 100, 125, 250, 500, 1000 Hz
Maximum installation tilt	$\pm 15^\circ$
Case connectors	14-pin MS3102E-type connector, SMA-A for active/passive GPS/GLONASS antenna, SMA-A for Wi-Fi antenna, Amphenol Straight Panel Mount USB-B
Dimensions	204 x 238 mm (diameter x height with handle)
ADC resolution	24 bit
Weight	7.8 kg
ADC noise performance	22 bits noise-free resolution at 100 sps
Gain coefficients	1, 2, 4, 8, 12
Case material	Aluminum, stainless steel
Data recording mode	continuous, schedule
Data recording format	Internal binary, miniSeed, SEG converters provided
Data storage	microSD 32 GB
Data transfer	USB 2.0, Wi-Fi
Cross-axes sensitivity	-50 dB
Inbuilt sensors for device health monitoring	temperature, main supply voltage
Cold-start time	5-15 min
Leveling, mass locking	none required
Delivery set	1.5 m USB A-B cable, 3 m GPS antenna, Wi-Fi antenna, SMA A/B adapter, 32 GB microSD card installed, 0.6 m PC-10 USB cable, 1.5 m analogue cable
GNSS receiver	GPS / GLONASS
GNSS timing accuracy	< 1 μ s