

The **SP-400** Series instruments are designed as versatile, very rugged medium period seismic sensors. Unlike traditional seismometers, they are based on proprietary electrochemical transducer technology.



These instruments have many advantages over conventional electromechanical sensors. This seismometer is available as a three-channel instrument with three identical sensors for its vertical and horizontal components, or a single-channel seismometer (**SP-400U**), which is available as a vertical or horizontal sensor. Force-balancing feedback provides for excellent response stability and linearity.

The **SP-400** sensors are offered in two application-dependent versions: a higher clip level **SP-400SM**, and a reduced noise **SP-400RN**. Both have the same dynamic range, which is shifted up by approximately 10db toward stronger ground motions in the SM version.

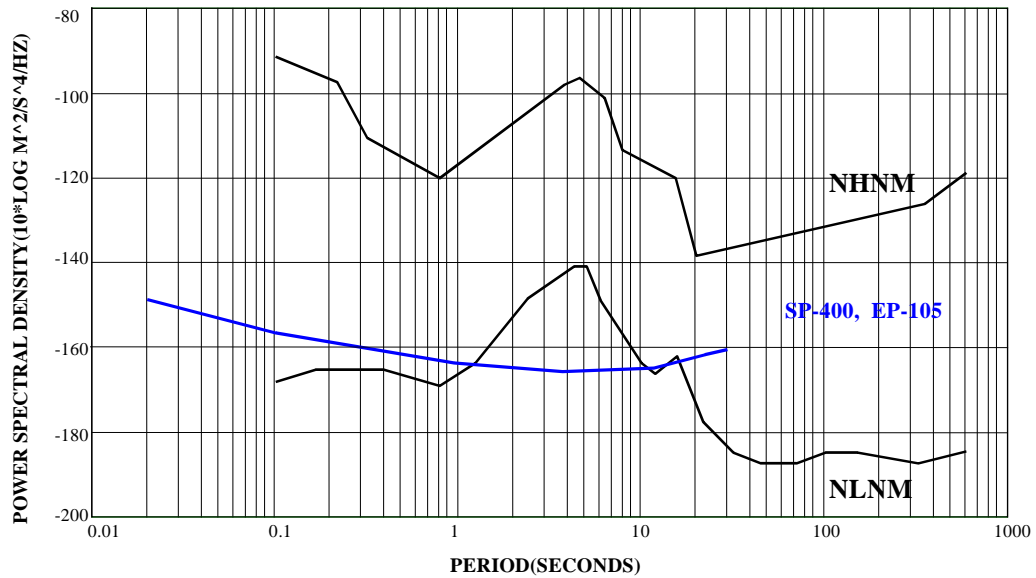
The **SP-400** has an exceptionally rugged design, does not require mass lock or special installation equipment or procedures and stays operational in a wide range of installation tilts.

These seismometers provide a low cost of ownership, **requiring no maintenance** over the life of the instrument. Borehole configurations including inclinometers are optional. Three and five-year extended warranties are available.

SP-400 Specifications

PARAMETER	SP-400
Operating principle	Proprietary Electrochemical Sensors ¹ ; force-balanced
Output signals	2 horizontal, 1 vertical; velocity flat response
Output swing:	+/-20 V differential (40 V p-p)
Dynamic Range	140 dB
Passband	0.06 – 50 Hz, Optional 100Hz
Generator constant	Standard: 2000 V/m/s; Optional: 350 – 20,000 V/m/s
Maximum installation tilt	+/-10 deg
Mechanical resonances	none
Environmental	Waterproof, submersible (1m)
Temperature range	-12 to + 55 °C
Housing material	Aluminum
Case diameter	200mm (4.5 inch, 114.3mm Borehole)
Case height	220mm
Weight	~8kg
Power	10 – 15 Vdc; (Nominal 12Vdc); 28mA
Connectors	14-pin circular

SP-400 NOISE FLOORS AND CLIP LEVELS



Specifications subject to change without notice

US patent No.6,576,103

0105

eentec

625 N. Euclid Ave., Suite 404, St. Louis, MO 63108

Tel: 314-984-8282 Fax: 314-984-8292

email: sales@eentec.com Web Sites: www.eentec.com