



Broadband Seismometer CME-6211

Features:

High Performance Broadband Seismometer

Wide dynamic range

Well suited for field experiments

Easy Installation

No Mass lock or Mass centering needed

Built-in calibration coil

0.0167 (60 sec) – 50 Hz frequency range

2000 V/(m/s) sensitivity

20V peak-to-peak differential output

Self-noise below NLNM in 15 sec – 1 Hz frequency range

Low power option

Installation tilts up to 15 degrees

Low-cost solution



The CME-6211 specifications

The CME-6211 seismometers combine the low-noise molecular-electronic sensing element (transducer) and the electrodynamic feedback, which results in very flat response over wide frequency range, high dynamic range and greatly improved time and temperature stability of the instrument parameters.

Like other molecular-electronic instruments, the 6211 seismometer 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 the rigid horizontal surface, turn the power on and wait for several minutes. The seismometer can be used in various areas including permanent stations and field experiments.

The sensing element of a MET transducer consists of two hermetically sealed filled with electrolyte housings connected by a channel with electrodes across. The electrodes are separated by perforated dielectric spacers. The electrolyte plays the role of the inertial mass, while hydrodynamic impedance of the sensing element acts as the damping mechanism providing a feedback for stabilization of the transfer function.

More on Molecular-Electron Technology (MET) on www.r-sensors.ru !

Configuration	Triaxial, orthogonal - Vertical, North, East
Sensitivity	2000 V/(m/s) or customized
Maximum input signal	10 mm/sec
Frequency bandwidth	
Medium band (best for field experiments)	0,1 (10 sec) – 20 Hz
Broadband	0,0167 (60 sec) – 50 Hz
	Limiting values 0.0083 (120 sec) - 50 Hz
Maximum output swing	±20V, differential mode
Output impedance	1000 Ohms
Dynamic range at 1 Hz	131 dB
Cross-axis sensitivity	-40 dB
Non-linearity at 1 Hz	0.2%
Temperature range	Standard range -12°C - +55°C (10.4°F - 131°F) Low-temperature range -40°C - +55°C (-40°F - 131°F)
Nominal supply voltage	12V, single supply
Nominal supply current	55mA- standard (8.3 .. 20 V DC), 27mA - low-power (10.5 .. 16 V DC)
Settling time till correct readings after power on	10 - 30 minutes
Mass Lock , Mass Centering	None required
Self-calibration	Simulated, vertical channel only
Connector type, cable	Hermetical MS-3106 type, 10 pin. 1.5 meter (4.92 ft) UTP cable or customized length
Case type, material	Double-shielded waterproof, aluminum
Case accessories	Bubble level, handle, three leveling feet, protective cap for connector
Weight	12 kg (26,46 lbs)
Dimensions including handle, diameter x height	272 x 240 mm (10.7" x 9.45")



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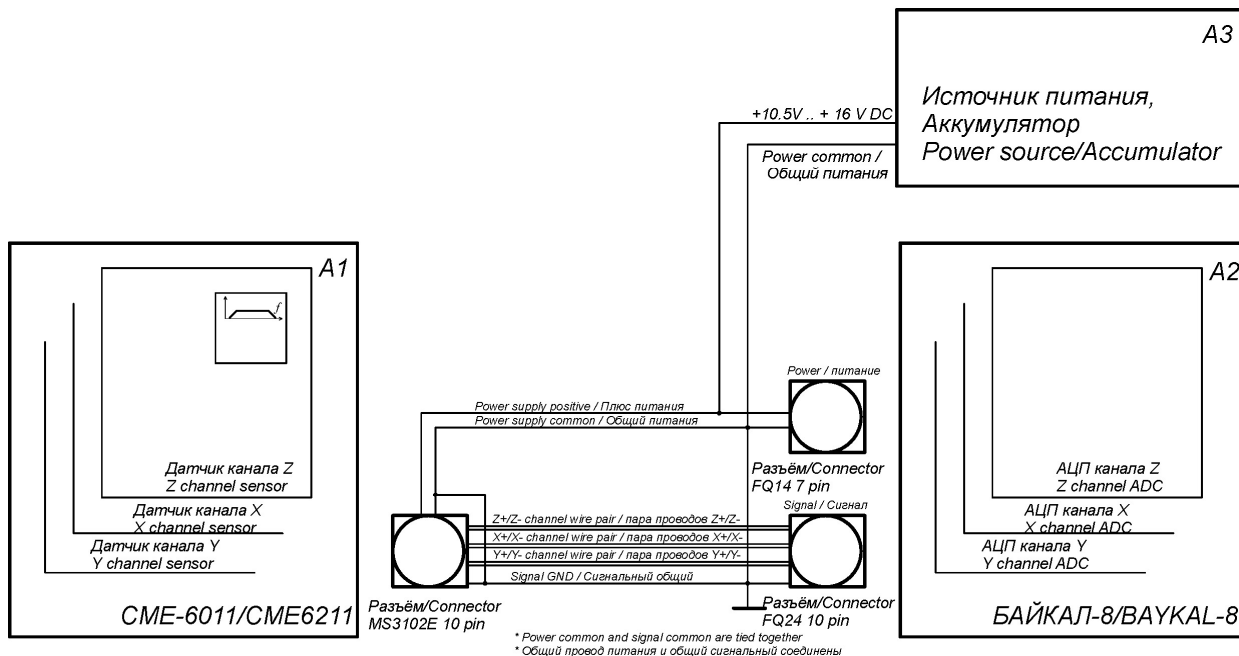


Fig. 1. Typical wiring diagram for CME-6211 seismometer in CME-BAYKAL seismic station

Field cable for Baykal-8

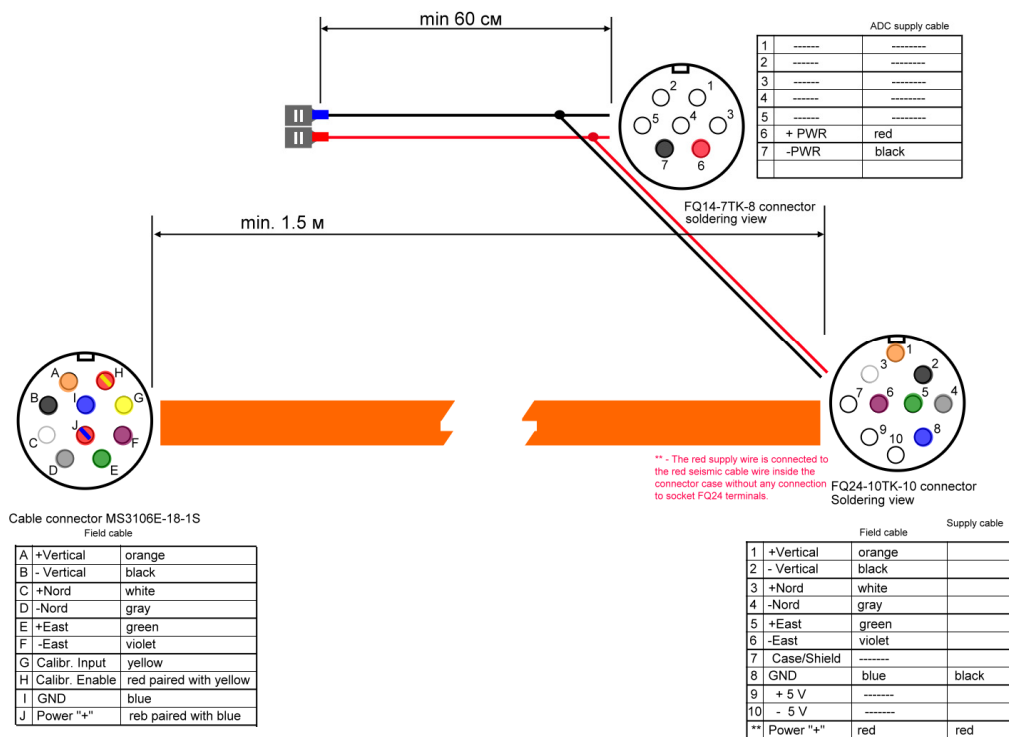


Fig. 2. Field cable pin assignment in CME-BAYKAL seismic station

Some of presented features and parameters apply to specific versions of the seismometer. For complete technical specifications see CME-6011 datasheet, or contact manufacturer. Specifications are subject to change without notice.



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