

SEISMIC SIGNAL RECORDER

A series of autonomous "Baikal" recorders of high-resolution seismic signals has been developed. It can be supplied in various modifications.



Application areas:

- investigations and applied works in geophysics and seismology;
- seismic monitoring of the Earth's crust state;
- nondestructive testing of engineering structures;
- investigations of explosions, sources of industrial, domestic vibrations and natural seismic activity.

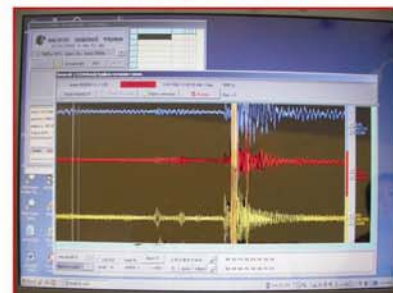
Specific features:

- Strong hermetic housing allows field work in any weather conditions in a wide range of operating temperatures;
- Functional capabilities of the recorder are enhanced by using manual buttons;
- Recorder is located near seismic sensor arrays, seismic data are recorded on the built-in storage device (capacity: up to 128 Gb) with subsequent transmission to the computer via a USB channel;
- Internal generator is synchronized with UTC time by the built-in GPS module with an accuracy of 1 μ s;
- High stability of the generator allows long operation of the recorder at disconnected GPS antenna.

Technical characteristics

the number of channels	3
data size	24 bits
input type	differential
input resistance	60 kohm
sampling rate, max	2000 Hz
operating frequency band (3 dB)	0-400 Hz
noise (0.15-40 Hz)	< 0.5 mW (eff.)
supply voltage (=ext.)	9-24 V
supply voltage (=int.)	2*1.5 V
power consumption	< 0.55 W
Range of operating temperatures	-200 +700C

Software allows specifying the following parameters and operation modes:



direct translation mode of seismic signals

- sampling rate;
- the number of recording channels;
- criteria for detection of seismic events;
- write turn-on with specified time intervals.