

48ch Portable Engineering Seismograph

McSEIS-SX48



<Abstract>

McSEIS-SX is a portable and cost effective 48 channel seismograph for refraction exploration, downhole PS logging and crosshole seismic for engineering and construction.

This is also used as a data acquisition system for multi-channel surface wave analysis.

The system is compact, light in weight to transport and do the job with a smaller 12VDC battery anywhere.

It's based on the Windows XP SP2 professional with XGA/TFT color display, Hard disk drive, USB2.0 ports with higher quality and reliable field performance.

<Features>

- All-in-one seismograph for conventional refraction, multi-channel surface wave analysis and simple reflection survey for engineering application
- Very Compact, light in weight and low power consumption
- Real time noise monitoring for trigger and real time digital filter
- 24 bit dynamic range with high speed sampling rate: 33.3 μ s fastest
- Enough frequency response for Surface Wave Analysis with 4.5Hz geophones
- Easy data download to USB memory stick

<Specifications>

● Data Acquisition

Number of Channels : 48ch max + 2AUX
Input Connector : PT02A-22-55P (Bendix) x2
Input Impedance : Differential 20K Ω /0.005 μ F
Preamp Gain : 12, 30, 48dB
Frequency Response : 2-4600Hz
A/D Resolution : 24 bits
Sampling Interval : 33.3, 50, 100, 200, 500, 1000,
2000, 4000 μ sec
Pre-Trigger : 0, 128 samples
Data Length : 1K, 2K, 4K, 8K@<4msec
and 16K/ch at 4msec sampling
only
Trigger Input : Hammer Switch (Contact
Closure), Geophone
Data Storage : SEG1(OYO SEG1) and SEG2

● System

CPU : ULV Intel Celeron Processor
Display : 10.4", XGA/TFT color LCD
Hard Disk : 80GB
Interface : USB2.0 port x 3
External keyboard port
Power Requirement : 12VDC (10.5 to 13.5VDC)
3.5A (standby), 5.0A (max)
Operating Temperature : 0 - 45°C
Physical
Dimensions : 330(W) x 280(D) x 260(H) mm
Weight : 11kg

● Others

Real Time Noise Monitor
Digital Low-Pass Filter
Notch Filter (post acquisition)
Channel Switching
Data Stacking
AGC (TVG)

● Option

Printer
Seismic Starter
Geophone 28Hz, 4.5Hz
Seismic Takeout Cable
Data Processing Software: SeisImager/2D
Borehole Pick Model-3315