GEOLOGICAL, GEOPHYSICAL, GEOTECHNICAL SERVICES AND INSTRUMENTS



# Passive Seismic System (3 ch)

# McSEIS-AT (3ch)



#### <Abstract>

"McSEIS-AT (3ch)" is a device for passive wave survey on the ground. With a light weight of 1.6 kg and cable-less system, the unit can be deployed on the ground very quickly for deep measurements.

The LED light on top of the unit allows you to check the operation status of the GPS network and battery.

Data acquisition is transferred into a PC using WiFi, and analysis is performed using bundled software "SeisImager".

With a deployment of McSEIS-AT (3 ch), available to carry out 1D, 2D and 3D survey.

#### <Feature>

- Max. 48 hours data acquisition is available with full-charged battery.
- Approx. 10 days continuous data acquisition is available with 8 GB internal memory. (In case of 4 msec sampling rate with solar power battery.)
- Import recorded data to PC using WiFi is available.
- Time synchronization by GPS is available without using any cable.
- Dust-proof and drip-proof function equivalent to IP67

#### <Specification>

Channel : 3 channels (Horizontal and Vertical)

Resolution : 24 bit

Pre-amp Gain (PG) : 0, 6, 12, 18, 24, 30 or 36 dB

Sampling Rate : 4 and 10 mS

Bandwidth (-3 dB typ) : 0.2 Hz to 100 Hz @ 4 mS, 0.08 Hz to 40 Hz @ 10 mS

Dynamic Range : 129 dB @ 4 mS, 12 dB (typ)

Distortion : < 0.001 % @ 25 Hz, 4 mS (typ)

CMRR : > 90 dB @ 60 Hz

Maximum Input :  $\pm 2.4$  V @ 0 dB,  $\pm 0.6$  V @ 12 dB,  $\pm 0.15$  V @ 24 dB Noise Level : 0.70 mVrms @ 4 mS 12 dB, 0.12 mVrms @ 4 mS 36 dB

Input Impedance :  $20 \text{ K}\Omega$ 

Internal Memory : 8 GB (Expandable Up To 32 GB)

Data Uploading : Available for data uploading with WiFi

Geophone Operation

: When the geophone is vibrated, the LED light of the main unit lights up. Check

Connector : Input Connectors for Geophone (19 pin), Charging, USB (8 pin)

Power : Internal Battery (9 AH Nickel Hydrogen Battery)

Charging : 9 to 14 hours

Environmental status : Equivalent to IP67

Dimensions : 140 (W) x 102 (H) x 142 (D) mm

Weight : 1.6 kg

Operating Temperature : -20 to +55 °C

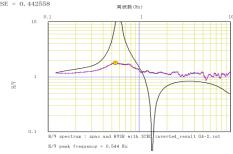
Software Automatic Analysis of Recorded Data via WiFi

(Using "SeisImager" software)

#### <Accessories>

- Geophone, PS-2B 3 ch, Land
- USB Battery Charger
- USB Battery Cable for McSEIS-AT
- Access Point for McSEIS-AT
- Base & Screw for Geophone PS-2B 3 ch, Land
- SeisImager/SW Software (2D)
- SeisImager/SW Pro Software (2D & 3D)

### <Sample Data of H/V Analysis> RMSE = 0. 442558





Please note specifications are subject to change without no ice for he improvement.

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