

EQ206

EQ206 is a portable node seismograph for large-scale active and passive source seismic exploration. Its main characteristics are wireless quality monitoring, node integration, low power consumption, and high reliability, supporting more than 10000 active and passive source operations(the most economical large-scale solution). This product is widely applicable in various fields of oil and gas, coal resource exploration, and engineering exploration.

Product Picture:



Integrated Charging Box:



The acquisition station uses 32-Bit ultra high precision Σ - Δ ADC, with ultra-low noise levels.



Built-in GPS and high-precision clock for long-term synchronization.



Integrated design with built-in detector, small size and light weight.



Charging and data export using a charging cabinet at the same time.



Using a mobile app to monitor real-time quality and record deployment information.



Compatible with active source and natural source exploration methods.



Exploration system supports over 100000 channels.



Support multiple data formats such as SEG-2, SEG-Y, SEG-D, SAC, Mini SEED, etc.



Can be equipped with a 32 channel charging and data recovery cabinet, charging and data export can be carried out simultaneously.

Practical Application for EQ206: 2D and 3D seismic exploration of coal and oil and gas resources/Survey of goaf/Dam foundation investigation/Shallow surface Geological survey/Building foundation survey/Road Airport Engineering Survey/Survey of urban subway Transportation engineering/Earthquake prevention and mitigation and earthquake safety assessment/Teaching and research in universities

Detector Parameter:

| | |
|-------------------|-------------|
| Natural Frequency | 5Hz |
| Sensitivity | 190 V/m/s |
| Frequency Range | 0.15~1600Hz |

Physical Indicators:

| | |
|-----------------------|--|
| Size | 107.5mm*107.5mm*125.5mm (without cone) |
| Weight | <1.3 kg (with battery without cone) |
| Waterproofness | IP67 |
| Operation Temperature | -40°C~85°C |

Electronics Indicators:

| | |
|--------------------------|---|
| Channels | Single Channel |
| Endurance | Built in battery with a battery life of 30 days (under normal operating conditions) |
| Synchronization Accuracy | $\leq 1 \mu\text{s}$ (After GPS signal lock) |
| AD Converter | 32Bit ADC |
| Preamplifier Gain | 0dB, 6dB, 12dB, 18dB, 24dB, 30dB, 36dB |
| Sampling Interval | 4ms, 2ms, 1ms, 0.5ms, 0.25ms |
| Maximum Input | 5 V |
| Dynamic Range | 123dB (1ms Sampling Interval, 0dB Preamplifier Gain) |
| Noise Level | 0.11 μV RMS (1ms Sampling Interval, 36dB Preamplifier Gain) |
| Common-mode Rejection | >110dB (1ms Sampling Interval, 0dB Preamplifier Gain) |
| Harmonic Distortion | <-122dB (1ms Sampling Interval, 0dB Preamplifier Gain) |

Charging and Data Recovery Cabinet

| | |
|-----------------------------|--|
| Number of Channels | 32 Channels(Charging and data recovery at same time) |
| Weight | 88 kg |
| Size | 1520mm*820mm*270mm |
| Data Transmission Interface | RJ45 Ethernet |
| Charging Current | Single Channel Max 4A, 32Channels Max 116A |
| Input Power | 220V/110V AC, Max Current 8A, Max Power 1760W |