CDT-1T2B Seismic Detection Wave

For weather automation applications

Features

- On-line & real-time monitoring
- Good corrosion resistance, suitable for all kind of soil
- High accuracy
- Simple operation and high reliability
- External module is converted into a standard signal output
- Multiple output signal is optional
- Probe can be used under water
- Submerged mounting bracket is optional

CDT-1T2B seismometer is a new generation of seismometer products launched by our company. The product has advanced design, excellent anti-interference, and the tolerance of each parameter index is controlled at ±2.5% Within, the distortion degree is less than 0.1%, stable performance, with high false frequency, high accuracy, rich and accurate signal acquisition, suitable for all kinds of accurate seismic exploration. It provides guarantee for the quality of seismic data acquisition. All parts are precision machining, the production process is stable.

Typical installation locations

- Environmental protection
- Agriculture
- Weather monitoring stations
- Ground detection

Design structure

Seismometers mainly use the principle of electromagnetic induction to detect seismic waves. When the seismic wave passes through the detector, the coil in the detector moves in the magnetic field, which creates an induced electromotive force. The magnitude of this induced electromotive force is related to the amplitude and frequency of the seismic wave.

Easy installation

Choosing the right installation site is crucial to accurately measuring seismic waves. In general, it should be chosen in a place with a stable geological structure and away from large vibration sources (such as factories, traffic arteries, etc.). For example, you can choose to install seismic wave testers in places such as mountains, suburbs or geoparks away from the hustle and bustle of cities.

Reliable operation

Seismic wave testers usually need to work in complex environments and are susceptible to external interference, such as electromagnetic interference, temperature changes, humidity, and so on. Therefore, the sensor should have strong anti-interference ability and be able to work normally under various harsh environmental conditions. For example, the use of shielding technology and filtering algorithm can effectively reduce the impact of electromagnetic interference on the sensor.

Installing & graph

CDT-1T2B installing

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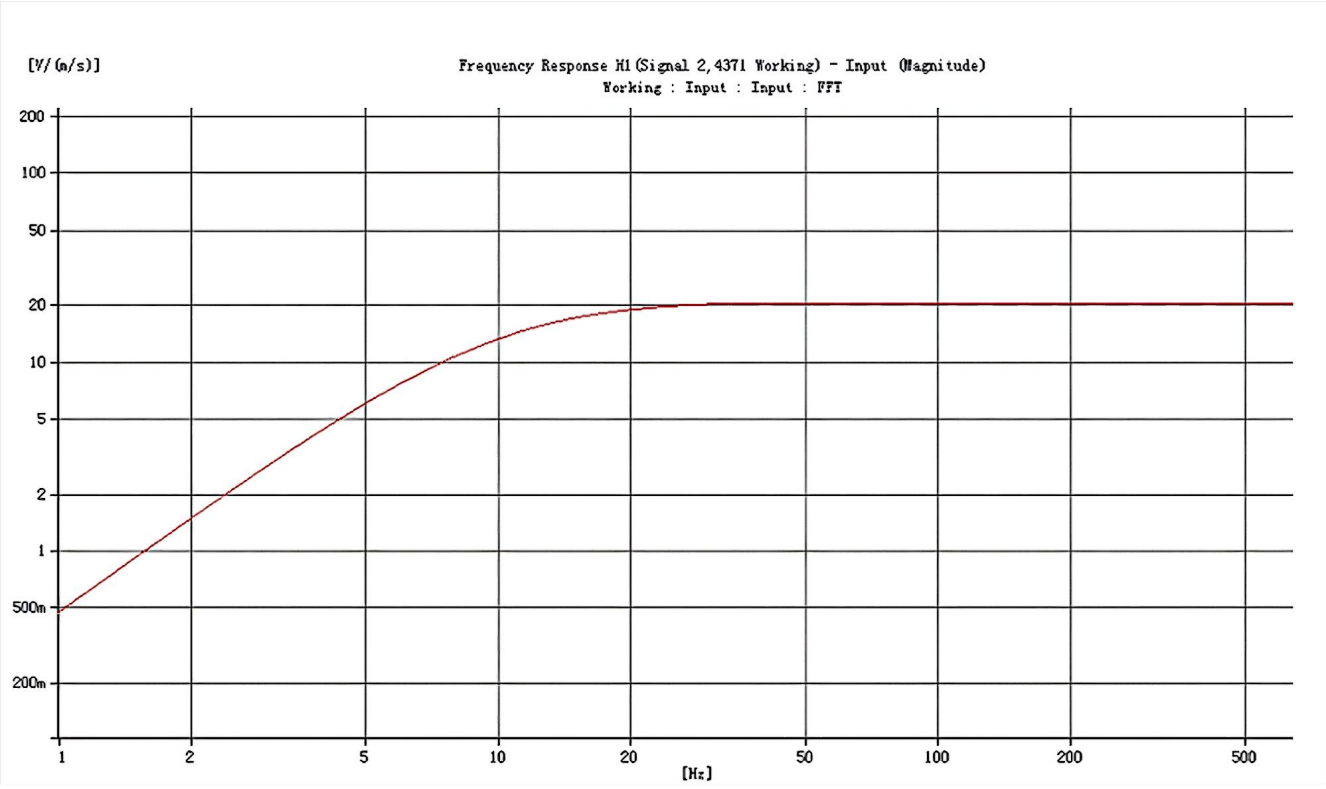
Consider the soil conditions of the installation site and avoid unstable geological areas such as soft sand, swamps or fill areas. At the same time, ensure that the installation site has good grounding conditions to reduce electromagnetic interference.
If it is to install multiple seismic wave testers to form a monitoring network, the installation position should be reasonably distributed according to the monitoring needs and topography to achieve comprehensive coverage of a specific area

Select a proper fixing support based on the actual installation site. The fixed bracket can be ground mounted, wall mounted or rod mounted.

Drill holes in the installation position using an electric drill, insert the expansion bolt into the hole, tighten the expansion bolt using a wrench, and secure the support to the installation position. Ensure that the levelness and verticality of the fixed support meet the requirements to ensure the installation accuracy of the seismic wave tester

Graph



Technical data

Measurement performance, models CDT-1T2B

Item	Technical Specification
Natural Frequency(Hz)	10±2.5%
(Q)Coil Resistance	395
Open Circuit Damping	0.3
Damping With Calibraticn -Shunt(1000Ω)	0.707±2.5%
(v/m/s)Open Circuit Sensitivity	28
(v/m/s)Sensitivity With Calibration -Shunt(1000Q)	20.1±2.5%
Resistance With Calibration -Shunt(1000Q)	283±2.5%
(%)Distortion	＜0.1
(Hz)Spurious Frequency	⩾250
Operating temperature	-40 - 80℃
Output	0-20mV RS485

Model number	Type	Output	Special features
CDF-10A	Wind speed	Pulses(PNP) RS485 4-20MA 0-5V	Three cup plastic wind speed
CDF-11A	Wind direction	RS485 4-20MA 0-5V	Plastic wind direction sensor
CDW-33A	Atmospheric Temperature,Humidity & Pressure	RS485	Shelter installation
CDY-12A	Economical Tipping Bucket Rainfall	Pulses(@10kΩ&0.01uF),RS485	Diameter :φ200mm, height: 271mm
CDG-10B	Solar Radiation	0-5V,4-20mA,RS485	Spectral range:300～1100nm
CDT-11A	PH sensor	0-2V 0-5V 4-20mA RS485	Probe: Φ28*160mm
CDT-12A	DO sensor	RS485 4-20mA	Range 0-20mg/L(ppm)
CDT-12B	DO sensor(calibrable)	RS485 4-20mA	Range 0-20mg/L(ppm)
CDT-14A	ORP sensor	RS485 4-20mA	Range -1500mV-+1500mV
CDT-15A	Suspended Matter	RS485	Range 0-200mg/L,0-1000mg/L,0-5000mg/L
CDT-17B	Soil PH sensor	RS485 4-20mA	Probe material:304SS
CDT-19B	Turbidity (SS) sensor	RS485 4-20mA	Wavelength of falling radiation：860nm
CDT-21B	Solil EC_salinity	RS485 4-20mA	Probe material:316L
CDT-22B	Soil Moisture & Temperature	4-20mA ,0-5V,0-2V,RS485 optional	Probe material:316L
CDT-30B	Soil Moisture,Temperature & EC	RS485,0-2V	316L stainless steel
CDT-70B	Soil 7 in 1 Sensor	RS485	Soil Moisture,Temperature & EC & PH & NPK
CDT-1T2B	Seismic Detection Wave	0-20mV RS485	Natural Frequency(Hz):10±2.5%
CDT-1T3B	Soil layers temperature&moisture	RS485	Range 0-100℃ 0-70%
CDT-1T4B	TDS Sensor	RS485 4-20mA	Range 0-2000ppm
CDT-1T5B	Dissolved CO2 Sensor	RS485	Range 0-2000ppm
CDT-1T6B	Residual Chlorine	RS485	Range 2mg/L,8mg/L,20mg/L
CDT-N0C	Multi-parameter water quality Sensor	RS485	Multi-parameter integration

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