

HZ-4000A Full-frequency Pipeline Detector



【Scope of Application】

HZ-4000A full-frequency pipeline detector is the preferred equipment specially detecting various kinds of pipelines for oil (gas) transportation, water supply, drainage, gas, heat, and industry, etc. and various cables for electricity and telecommunication, etc. used by such underground pipeline design organizations as professional pipeline detection, pipeline management and maintenance, municipal administration planning and construction, power supply, building and construction. It's also the optimum replacement for traditional underground pipeline detectors.

【Characteristics】

1. Adoption of DSP processors, having a higher calculation speed and accuracy;
2. The orientation function available to indicate the pipeline running, making location faster;
3. The 10W broadband transmitter used, applicable to various environments;
4. The Lithium battery pack used to supply power for both the receiver and the transmitter, being energy-efficient and environmental-friendly, able to save battery costs of RMB 3000 to 5000 yuan annually.

【Working Principles】

The full-frequency detector detects underground pipelines electromagnetically, which applies signals to metal pipelines through the transmitter, generates the piping currents in metal pipelines and the secondary magnetic field around pipelines, and measures the secondary

magnetic field of pipelines on the ground through the receiver, in order to accurately determine the location, buried depth, running direction, route and signal current intensity of pipelines.

【Technical Parameters】

Transmitter:

Function: to apply the location signal of a certain frequency onto pipelines

Output modes: induction, direct link, clamping

Working frequencies: 128Hz, 512Hz, 1KHz, 2KHz, 8KHz, 33KHz, 65KHz, 83KHz

Frequency configuration at various modes:

Induction mode: 65KHz, 83KHz

Direct link mode: 128Hz, 512Hz, 1KHz, 2KHz, 8KHz, 33KHz, 65KHz, 83KHz

Clamping mode: 33KHz

Maximum power output: 10W

Maximum voltage output: 60V

Maximum current output: 1A

Power supply: dual power supply, Lithium battery pack (energy-efficient and environmental-friendly)

Continuous working time:

1W 12 hours

5W 8 hours

10W 5 hours

Weight: 2.6Kg

Ambient temperature: -20°C-50°C

Quality standard: ISO9001: 2008

Receiver:

Purpose: location of underground pipelines and cables (able to measure the position, running direction, depth, and current of underground pipelines)

Location modes:

Peak mode: two horizontal coils used

Broad peak mode: one horizontal coil used

Valley mode: one vertical coil, having the function of left and right orientation

Receive frequencies: 50Hz, 100Hz, radio, 128Hz, 512Hz, 1KHz, 2KHz, 8KHz, 33KHz, 65KHz, and 83KHz

Gain control: automatic gain, range of 0-100dB

Location accuracy: 5% of depth (range of depth: 0-3m)

10% of depth (range of depth: >3m)

Measurement accuracy of currents: $\leq 5\%$ of actual current

Range of measurement: 0-6m

Power supply: Lithium battery pack (energy-efficient and environmental-friendly)

Working time: an average of 8 hours

Weight: 1.8kg

Ambient temperature: -20°C - 50°C

Quality standard: ISO9001: 2008

【Standard Configuration】

10W broadband large-power transmitter, full-frequency receiver, clamp, direct link line, earthing bar, transmitter charger, receiver charger, packing box, and user's manual