

**UNDERGROUND
PIPELINE
DETECTOR**

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ALPHA DT2

Quick Search | Precise Positioning | Sensitive Tracking

ALPHA DT2

Underground Pipeline Detector

The underground pipeline detector is the latest multifunctional equipment developed by AlphaGEO for detecting pipelines, pipes, cables, optical fibers, etc. It can accurately determine the position, path direction, and burial depth of underground pipelines. It can identify target cables even in complex cable networks and precisely locate cable grounding faults. As a comprehensive solution in the field of detection, it truly achieves multi-purpose functionality, significantly reducing usage costs.



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Underground Pipeline Detector



The design of the underground pipeline detector conforms to ergonomic principles. The device is lightweight, sturdy, durable, and highly resistant to harsh environments. It features a high-definition backlit color LCD screen in both Receiver and Transmitter, ensuring clear visibility under any weather or lighting conditions for all-day operation. The intelligent compass tracking and positioning function provides real-time visual display of the detected object's position, direction, and burial depth. With a wide frequency range, it meets the needs of various users and supports custom frequencies.

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Functions and Applications

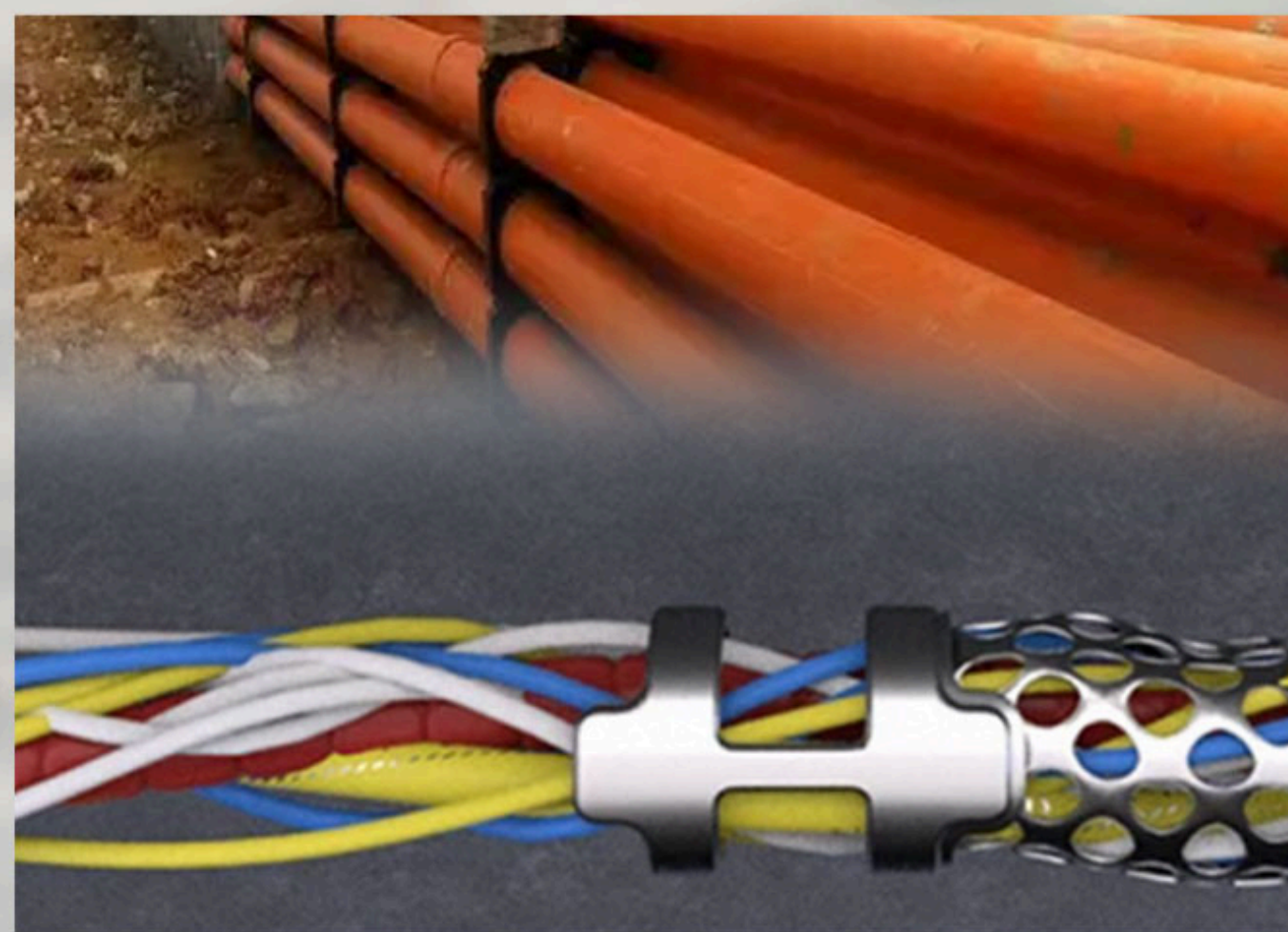
Underground Pipeline Detection

Accurately detect the position, path direction, and burial depth of underground pipelines, cable, optical fiber, etc, all performed simultaneously by a single operator. Maximum detection depth: 20 meters.



Live Cable Identification (optional)

Accurately identify target cables, even in large or complex cable networks, ensuring reliable detection.



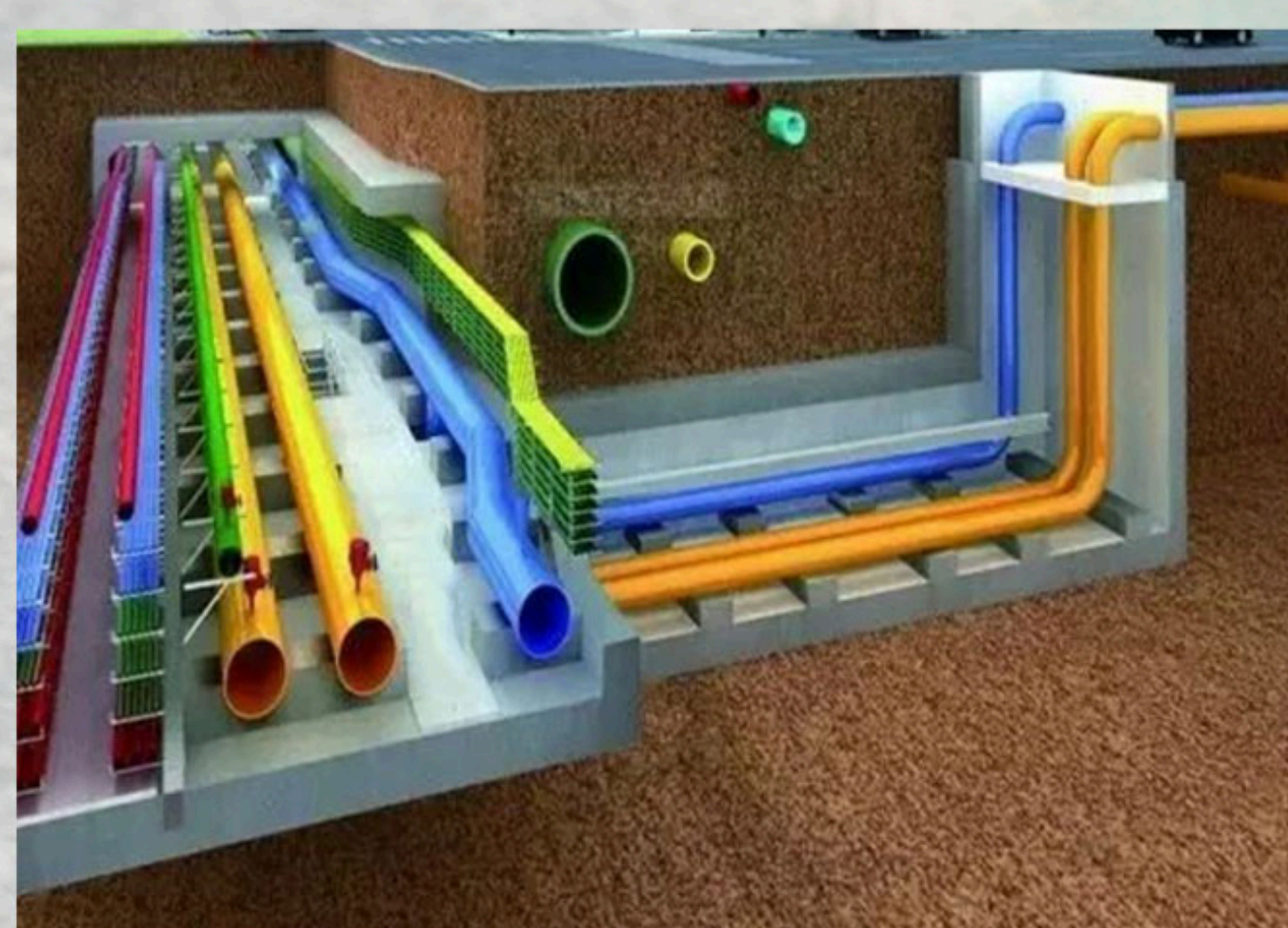
Ground Fault Detection (optional)

Quickly and precisely locate cable (optical fiber) grounding faults. All performed simultaneously by a single operator.



Pipeline Coating Inspection (optional)

Accurately detect corrosion points, damages, and their severity on underground pipeline insulation coatings. All performed simultaneously by a single operator.

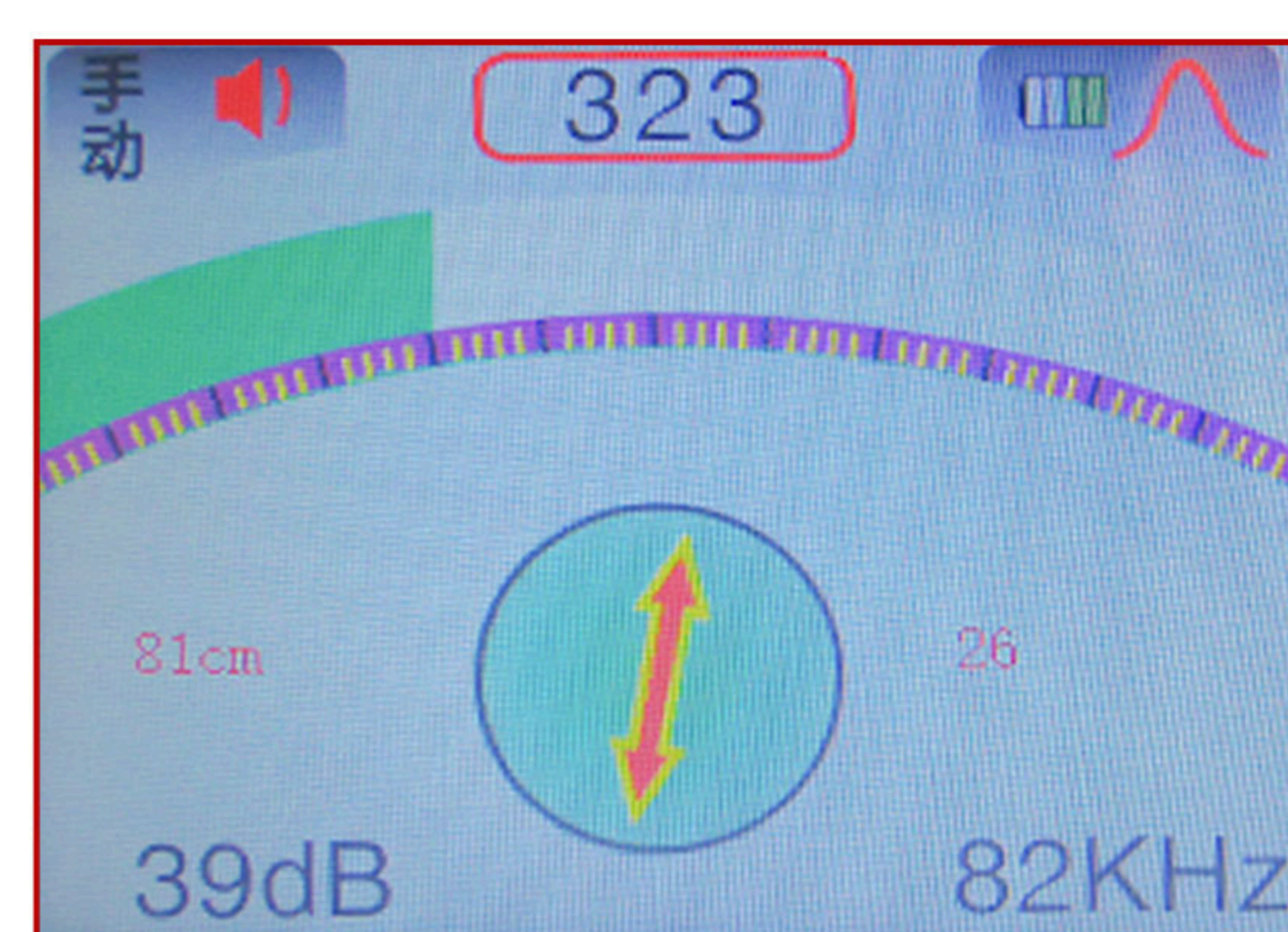
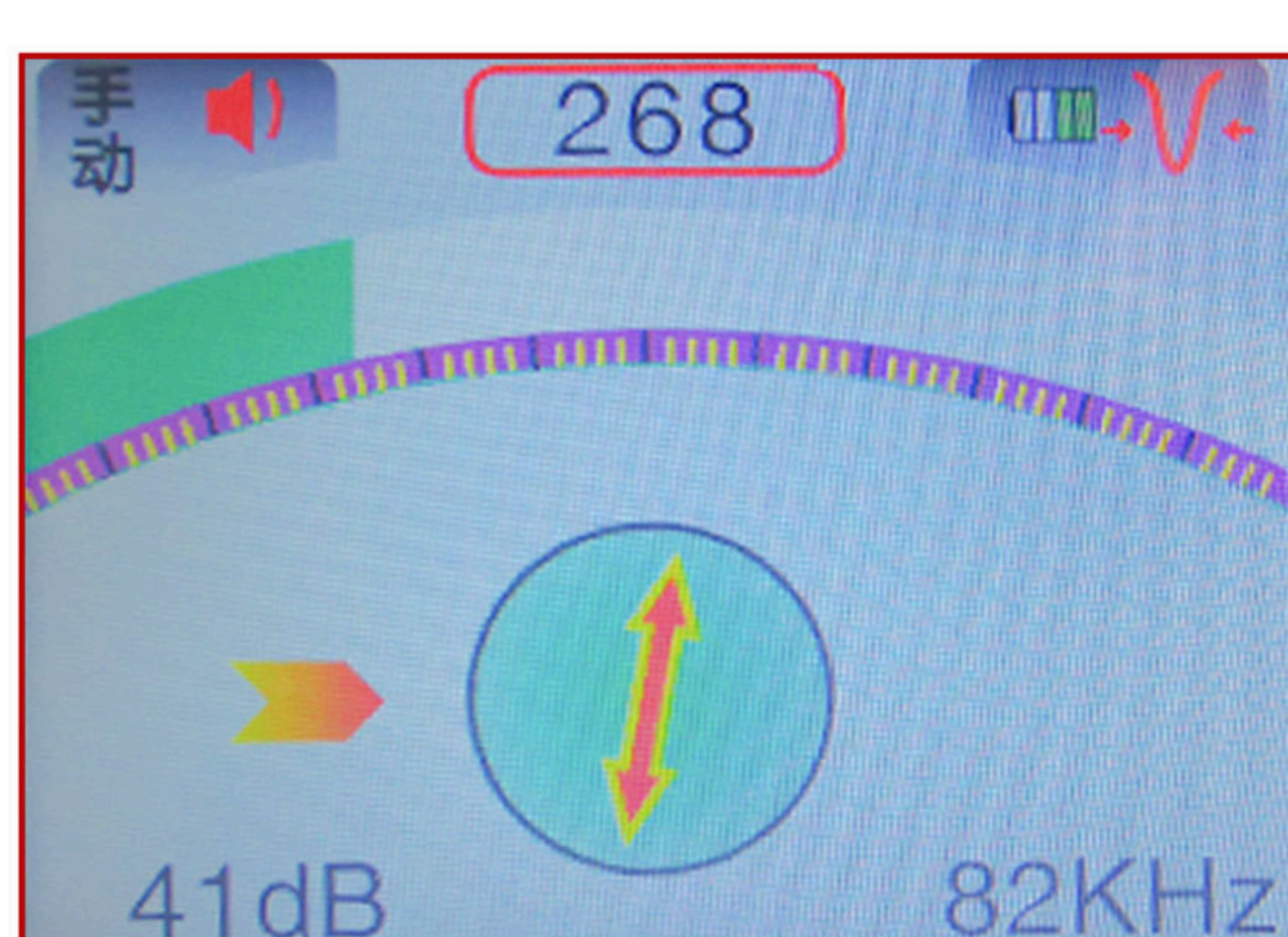


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Advantages and Feature



- ★ Waterproof touch-sensitive buttons.
- ★ Color intelligent compass tracking and positioning function, providing real-time visual display of the detected object's position, direction, turns, and burial depth. Simple operation, all performed simultaneously by a single operator;
- ★ Dynamic left/right arrow indicators and audio signals for quick and intuitive target center positioning;
- ★ Ergonomic design, compact structure, excellent balance, lightweight, sturdy, durable, and highly resistant to harsh environments;
- ★ High-definition backlit color LCD screen, low power consumption, clear visibility under any weather or lighting conditions for all-day operation;
- ★ Supports 50Hz and 60Hz passive detection. Active frequency range covers 50Hz to 200 kHz, meeting the needs of various users and supporting custom frequencies;
- ★ Maximum output power: 10 watts, suitable for deep burial and long-distance pipeline positioning;
- ★ Peak mode offers strong anti-interference capability, ideal for precise positioning and depth measurement in dense or complex pipeline environments, and is the preferred mode for pipeline detection;
- ★ Valley mode provides higher signal sensitivity, suitable for detecting deep or long-distance single pipelines;
- ★ Wide-peak mode balances anti-interference and signal sensitivity, suitable for detecting deep single pipelines.
- ★ Direct depth reading is suitable for single pipeline conditions and depth reference.



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Technical Specifications



Transmitter



Receiver

Transmitter	
Display	High-definition backlit color LCD screen
Operating frequency	512 Hz to 200 kHz
Transmission modes	Direct connection, Coupling, Induction
Short-circuit protection function	
Matching load	Automatic matching
Maximum output power	10 watts
Battery	Built-in rechargeable lithium battery, continuous operation for 10 hours after full charge
Waterproof/Dustproof	IP65
Dimensions	345x266x120mm
Weight	2.8 kg
Receiver	
Display	High-definition backlit color LCD screen
Guidance	Color intelligent compass tracking and positioning
passive frequencies	50/60Hz; Active frequency range: 50Hz to 200 kHz
Automatic identification of external accessories	
Four working modes	Peak, valley, wide-peak, peak-distance arrow
Signal strength	Graphical qualitative display and numerical quantitative display, range 0–1000, indicating maximum signal strength
Dynamic gain	Range 0dB to 100dB
Detection depth	Maximum 20 meters
Audio indication	Real-time tone
Battery	Built-in rechargeable lithium battery, continuous operation for 10 hours after full charge
Operating temperature	-20°C to +70°C
Waterproof/Dustproof	IP65
Dimensions	668x110x(53–288)mm
Weight	1.8 kg



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Where Precision Meets Innovation