

# Transient Electromagnetic Water Detector

This water detector uses an industrial PC as the main controller with a Windows control panel for high automation. The power supply method utilizes a 'Big currency small coil' to achieve a 200A big currency continuous square-wave power supply.



## Product Overview

### Transient Electromagnetic Method (TEM)

This Transient Electromagnetic Water Detector utilizes advanced time-domain electromagnetic methods to map subsurface geological structures. By analyzing conductivity and magnetoconductivity differences, the system identifies underground water, mineral deposits, and geological formations with high precision. Designed for rugged field use, it features an industrial-grade controller and robust anti-jamming technology to ensure reliable data acquisition in diverse environments.

#### Key Applications

Groundwater Exploration, Mineral Detection, Geothermal Resources, Coal Bed Detection, Geological Mapping

## Receiver Performance

### Receiver Performance Metrics

**140 dB**

Dynamic Range

**0.1  $\mu$ V**

Resolution

**64 ms**

Max Sampling Delay

### Sampling Rates

- 1
- 4
- 16

#### Storage Capacity

256M Memory / 40G Hard Disk

## Transmitter Specifications

### Current Intensity Options

- 25
- 50
- 100
- 200

### Pulse Width Options

- 10
- 20
- 40

#### Transmitter Weight

2 kg

## System Features

### System Advantages

Industrial PC Controller • Vibration Resistant • Anti-Jam Technology • Low Noise Preamplifier • High Automization

### Interface Connectivity

USB, Parallel Port, Serial Port, Network Card