



AUTOMATIC GROUNDWATER LEVEL MONITORING SYSTEM

Introduction

ZHICE YUNLIAN groundwater level monitoring equipment is widely applied in water level measurement scenarios. It is available in measuring ranges of 100m, 200m, 300m and 400m. Built with a high-pressure-resistant hermetic sensor chip for online monitoring systems, it features an integrally molded structure, triple lightning protection technology and IP68 waterproof rating. Signal transmission adopts tensile steel wire cable to ensure real-time, high-precision and stable data output.

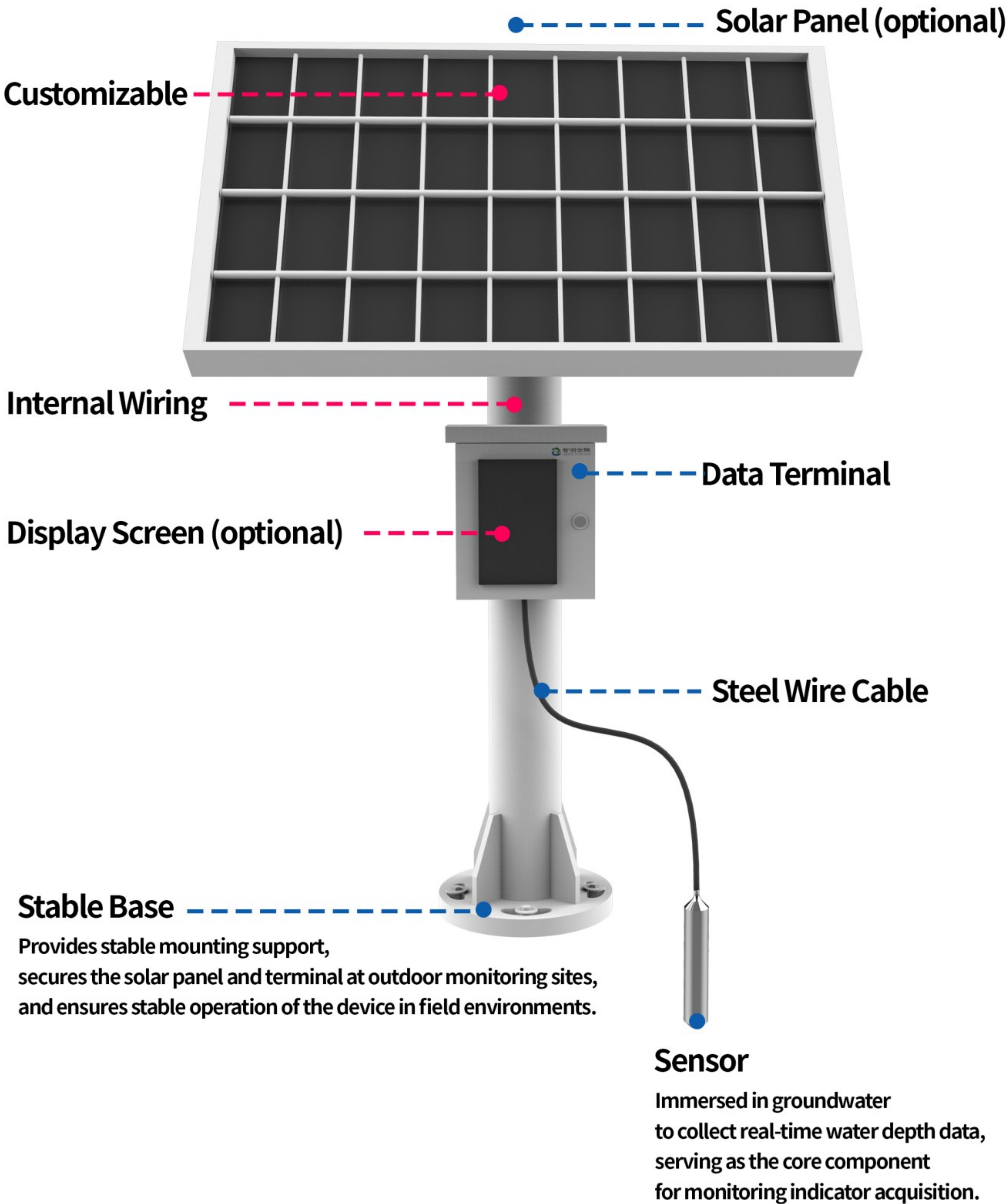
Function

- 1. Real-time monitoring:** Collects groundwater level data in real time to keep users updated on dynamic changes of groundwater.
- 2. Deep measurement capability:** The device supports a maximum measuring depth of 400 meters, meeting the monitoring demand for deep groundwater resources.
- 3. Data transmission and storage:** Users can select appropriate transmission modes according to actual needs to ensure data timeliness and accuracy. The device also supports data storage to retain historical monitoring data for long-term analysis and comparison.
- 4. Easy installation and maintenance:** With a concise structural design, the device is quick and easy to install. It is also equipped with self-diagnosis function to detect and alert potential faults in time, facilitating daily maintenance.





Structure



Specifications

Item	Specification
DC Power Supply (default)	DC 10-30V, typical 24V
Maximum Power Consumption	0.2W
Transmitter Temperature Tolerance	-40°C ~ +80°C
Overload Capacity	< 1.5 times the measuring range
Protection Grade	IP67 (housing), IP68 (underwater probe)
Sampling Rate	2400 times/s (adjustable)
RS485 4-core Shielded Twisted Pair Cable	Standard 100m (customizable)
Solar Power System	30W panel, 20AH battery
4G Transmission	Includes 1-year data traffic service (extendable)
Display Screen	7-inch Android touch screen (optional)

Features

No.	Feature Description
1	Equipped with reverse polarity protection and instantaneous overcurrent/overvoltage protection, complying with EMI protection requirements.
2	Adopts high-quality gas-permeable cable, suitable for long-term immersion in water.
3	Strong overload and anti-interference performance, cost-effective and stable in operation.
4	Built-in core automatic calibration algorithm, which effectively suppresses data fluctuations caused by water surface ripples.
5	Sloped liquid inlet design, which effectively blocks sediment and impurities and provides impact resistance.
6	Adopts diffused silicon piezoresistive sensing element.
7	Throw-in type probe design for simple and convenient installation.
8	Multi-layer protective structure with high protection performance.
9	Made of anti-corrosion stainless steel, applicable to various scenarios.
10	RS485 signal output, with a maximum communication distance of 2000 meters.
11	10~30V wide-range DC power input.
12	Embedded solar panel top cover design, improving photoelectric conversion efficiency and wind resistance grade.
13	Charge controller with MPPT maximum power point tracking, increasing charging efficiency by 20%.
14	SMS alarm function: sends alert SMS to designated phone numbers when monitoring data exceeds the threshold.
15	ABS protective enclosure, corrosion-resistant and anti-oxidation, with IP67 protection grade.
16	The underwater probe reaches IP68 waterproof grade, far above the industry average level.