

## DATASHEET

## Level

## Steel Ruler Water Level Meter

### Model PWL-S

#### Applications

- Deep wells, boreholes standpipes
- Dam power station
- Underground well water
- Water conservancy
- Hydrological monitoring
- Agricultural irrigation
- Environmental projects

#### Features

- 9V lithium battery power supply
- Easy to use and read value
- Resolution 1 mm
- 14mm diameter probe for narrow application
- Submersible in 0-30m...500m range optional
- Sound and light alarm when probe contacts water



Level Meter PWL-S

#### Description

PWL-S series water level meter with length marked steel ruler provide accurate measurement for the depth of water in deep wells, boreholes, standpipes, tanks, and especially suitable for hydropower engineering underground water level or dam water level observation artificially.

It is robust, easy to use and read accurately with 1mm resolution. The water level meter is supplied on a sturdy winding reel complete with a brake and carrying handle. Features include a shrouded stainless steel probe(to detect water), a buzzer(buzzing when probe contact the water) and sensitivity control as standard. The moisture resistant electronics and standard 9V lithium battery are housed in the front for quick and easy access.

## Specifications

Model	PWL-S
Order Length	30m, 50m, 100m, 150m, 200m, 250m, 300m, 400m, 500m, 600m, 700m
Minimum Indicator	1mm
Repeat Indicator	±2.0
Probe Diameter	Φ14mm
Probe Material	SUS316 Stainless Steel
Reel Color	Yellow, blue, red, black
Reel Material	Plastic ABS or Metallic
Power Supply	9V lithium battery
Working Temp.	-20℃~60℃
Response Time	≤1ms
Adaptation range	10μΩ~1000μΩ(water quality)
Measurement Signal	LED, buzzer, electricity meter
Cable Specs	Conductor: Multi-strand tinning copper wires twisted core Wire: Special PP mixed insulation Ecderon: LDPE Ecderon color: Transparent Width*Thickness: 9.8*2.0mm
Bracket Material	Metal

## Colors



Yellow (plastic reel)



Blue (plastic reel)



Red (plastic reel)



Blue (metal reel)

## Using Method

When measuring, after allowing the winding reel to rotate freely, press the power button, put the probe into the water pipe, take the steel ruler in your hand, and let the probe dropping down slowly, and hold the ruler when hearing the sound of buzzing, that means the contact point of probe touches the water. At this time, read the scale of the steel cable, which is the distance between the groundwater level and pipe mouth. So to record the water level.

\*If the buzzer is not audible when measuring in a noisy environment, you can observe the indicator light and the voltmeter.

## NOTICE

1. When the contact of the probe touches the water surface, buzzer will make a sound, the indicator light is on, and the pointer of the voltmeter rotates. At this time, the steel ruler cable should be placed slowly, in order to carefully find the exact position of the sound or indication moment, and then read the depth dimension of the point the pipe mouth.
2. The accuracy of the reading depends on the timely judgment of starting position of the buzzer or indication. The accuracy of the measurement is related to the proficiency of the operator, so repeat practice and operation should be performed.

## Maintenance

Due to the limited battery capacity, whenever the measurement is complete, the power switch should be turned off immediately! When replacing the battery (the battery is 9V, the multimeter battery). Open the cover of the battery box to replace the battery. After the measurement, the probe and the steel ruler cable must be wiped clean, and the steel ruler must be neatly wound on the winding reel, and then placed in the cabinet. The measuring cable must not be bent, especially to avoid damage for the sheath part of probe. The probe should be handled with care and avoid violent vibration.

## How to Order

Example Part Number: **PWL-S150YPN**

Model No.	PWL-S	PWL-S
Order Length	30=30m 50=50m 100=100m 150=150m 200=200m 250=250m 300=300m 400=400m 500= 500m ...	150
Reel Color	Y=Yellow(typical in stock) BE=Blue R=Red BK=Black	Y
Reel Material	P=ABS plastic(only for ≤300m range) M=Metallic	P
Wheels	W=With wheels(typical for 400m and 500m, for other length cost higher) N=Without wheels	N