Waterlevel – Sensor WLS

Introduction

The water level sensor is suitable for monitoring water tanks, water collection basins, cisterns, wells, municipal water supply, drainage and hydrology. It is equipped with a powerful pressure sensor as a sensing element to measure the static liquid pressure, which is proportional to the depth of the liquid. Immersed in the liquid, it measures the level from the bottom of the transmitter to the liquid surface. The sensor can be connected to a data logger or IoT data collection device.

Features

•High precision, corrosion-resistant
•Separate construction; full sealed stainless steel construction for submersible sensor, easy for installation and wiring
•Lightning Protection, Water-proof and oil-proof cable, special cable with air-venting conduit

Technical Parameters

Cable Length	6 m, with retaining loops
Pressure Span	0 to 5 m Water level
Output Signal	0-5V
Supply Input	5V DC
Accuracy	+/-0.52% Full Scale
Non-Linearity	+1-0.50% FS
Repeatability	+1-0.10% FS
Thermal Error	+1-0.2% FS/°C
Zero Drift	+1-0.25% FS
Long Term Stability	+1-0.5% FS/Year
Over Pressure Safety	200%
Operating Temperature	-10°C to 80°C
Response Time	<1 ms (10-90%FS)
Diaphragma	Stainless Steel 316L
Case Material	Stainless Steel 304L
Protection	IP68

Terminals Wiring

Note: Please follow the diagram in strict accordance with the wiring.
Power+: Red
Power-: Green
Signal: Yellow
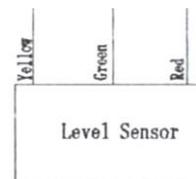
Use a Connection Box with air pressure compensation ventile.

Installation

As shown in picture 1,when the sensor is installed in **static water** such as in pools, water towers, probe is immersed into the bottom and should be as far as possible **away from the pump or valves**. The terminal unit box should keep above water surface and prevent water penetrating into cables. Please make sure the cable ventilation airway is not be blocked. Use a Connection **Box with air pressure compensation ventile**.
We recommend to use a wireless Data transmission unit (IoT).
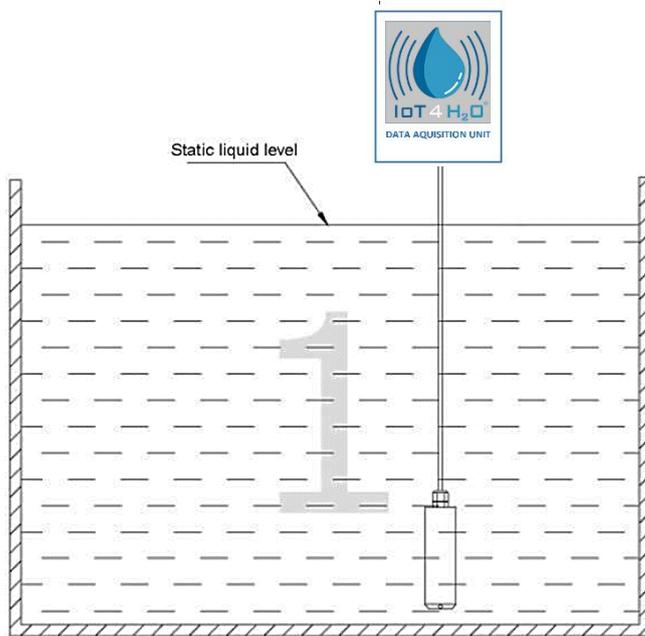
As shown in picture 2,when the sensor is installed in **dynamic water** such as dams or rivers,probe should be inserted into a **pipe** (inner dia is > 45mm), burrowing several **holes** at different height on the pipe side wall which is opposite to the water flow direction. The terminal unit box should keep above water surface and prevent water penetrating into cables. Please make sure the airway not be blocked. Use a Connection **Box with air pressure compensation** ventile.