

Water Turbidity Sensor

Description

A turbidity sensor is an analytical instrument designed to measure the turbidity level of water, representing the degree of suspended particulate matter within the medium. The sensor operates based on an optical transmission measurement principle.

The sensor incorporates an infrared emitter–receiver pair (IR958 infrared light source and PT958 phototransistor) housed within the sensing assembly. Infrared light is transmitted through a defined optical path within the water sample. The intensity of light received by the photodetector is inversely proportional to the turbidity of the water: as turbidity increases, light scattering and absorption increase, resulting in reduced transmitted light intensity.



The photodetector converts the received optical signal into a corresponding electrical current. Higher light transmission produces a higher output current, while lower light transmission produces a lower output current. The turbidity level of the water is calculated by measuring and processing the magnitude of the photodetector output current.

Together with ChinoINT wireless technologies and analytic platform, this becomes the Smart Solution that boost the efficiency and sustainability.

Device Specifications

Dimension	135mm x Φ25mm
Sensing Range	0 - 2000 NTU
Resolution	1 NTU
Accuracy	± 2% F.S. or ± 3NTU
Temperature Compensation Range	0 to 70 °C
Pressure Range	0 - 3 bar
Working Humidity	Less than 90%
Sensor head IP Rating	IP68

Ordering Information

Part Number	Frequency
AERMHWTL923	LoRaWAN AS923
AERMHWTBEX4G	4G
AERMHWTBEXWF	Wifi



Warning

Assumes no liability for any damage resulting from the use of this product. CHINOTECH INTERNATIONAL LIMITED reserves the right to change this data sheet at any time without notice. The information furnished by ChinoINT is believed to be accurate and reliable. However, no responsibility is assumed by ChinoINT for its use, not for any infringements of patents or other rights of third parties resulting from its use.

Product Warranty and Customer Support

ChinoINT warrants all products free from defects in material and workmanship for a period of one year from the date of shipping. During the warranty period, we will, at our position, either repair or replace any product that proves to be defective. To report any defect, please inquiry sales@chinoint.com

Unauthorized opening and improper repairs on the device may result in substantial damage to equipment or endanger the user. The product described in this documentation may be operated only by personnel qualified. Qualified personnel are those who, based on their training and experience, are capable of identifying risks and avoiding potential hazards when working with these products. Always disconnect the power plug before you open the device.

Please have the model, serial number and a detailed problem description available when you call. If the problem concerns a particular reading, please have all meter readings available.

This warranty does not apply to defects resulting from unauthorized modification, misuse. If you install or exchange system expansion and damage your device, the warranty becomes void.

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We have reviewed the contents of this publication to ensure consistency with the hardware and software described. Since variance cannot be precluded entirely, we cannot guarantee full consistency. However, the information in this publication is reviewed regularly and any necessary corrections are included in subsequent editions.

