## Online Turbidity Meter

#### Application:

This product is applied to measure the light scattering degree produced by the not-dissolved particles in the suspended transparent or opaque liquid and measure the content of these suspended particles.

Waterworks: turbidity monitoring of reservoir, well, clean water pool, filter, filtered, precipitation and water treatment plant



Industrial process: water quality monitoring of production recycled water, recycled water, etc.

Sewage treatment: water quality of inlet and outlet

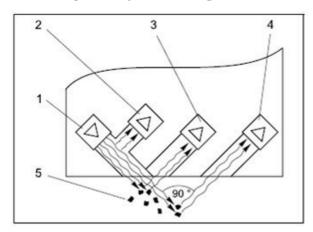
Online turbidity measurement of electric, pure water, beverage, wine and pharmaceutical industries

#### Features:

- Standard 90° scattering light measurement technique which provides reliable measurement results
- · Immersion type probe with self-clean wiper, maintenance-free
- · Simple key operation
- · Digital sensor, two-channel input, plug and play
- Self-diagnostic function
- Low-scale circulating built-in bubble eliminating system
- The measurement result is not affected by the bubbles.
- · Scattering composite light; Low turbidity data is not affected by Brownian diffusion impact
- Automatically compensation for voltage fluctuations, device aging, temperature change and sludge color

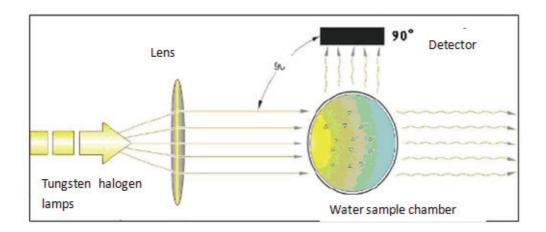
## Working principle:

Immersion sensor, the transmitter transmits an infrared beam at an angle to the direction of the radiating medium , light encounter particles in the medium, then scatter. part of the scattered light incident on the receiver  $90^\circ$ , absorbed by the receiver, compared with the reference Comparative optical receiver combining the plurality of receivers to compensate for the calculation, because the detector receives the light intensity and the measured turbidity of the effluent of a certain relationship , so by measuring the scattered light intensity can be calculated turbidity of the water .



- 1) An infrared light emitter
- 2) Reference diode
- 3) Is a scattered light receiver
- 4) Scattered light receiver 2
- 5) Particles

## **Online Turbidity Meter**



Flow- sensor, water samples go through the bubble trap, entrained air bubbles are removed, it flow into the measurement chamber of sensor, through the center column.

The measuring chamber is sealed in a dark chamber , do continuous online measurement accuracy . And a replaceable desiccant pack ensure reliable measurement environment. Incandescent light emitted by the light source assembly of the sensor , after being scattered by particles in the sample with a beam of  $90^\circ$  to a monitor receiver ,the received signal proportional to the turbidity of the sample.

#### Technical Parameter:

**Detector** 

Measurement Range : 0 ~ 20NTU, 0 ~ 200NTU, 0 ~ 100mg/

l, 0~1000 mg/l

Accuracy :  $\pm 2\%$ FS

Reproducibility : better than reading  $\pm 1.0\%$ Response time : 1S (can be adjusted)

Velocity of flow : 100-700ml/min Temperature : 0°C to 40°C

Cable Length : Standard 10m, The maximum length 100m

Protection : IP68

Water pipe : 1/4"NPT Internal thread, 1/4" Compression fittings (provided)

Drainage pipe : 1/2"NPT Internal thread, 1/2" Hose(provided)

**Transmitter** 

Analog output : 4~20mA

Digital output : MODBUS/RS485, MODBUS/RS232

Output relay : Four alarm system, 250VDC, 3A, all the way to the cleaning

system 250VDC, 3A

Frequency of reading : 0.5S one time

Power supply : 90-265VAC, 50/60HZ

Protection : IP65

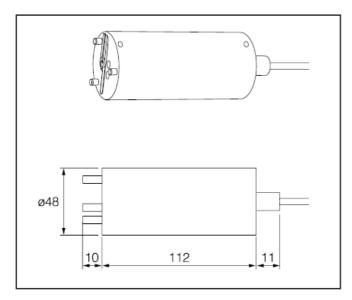
Installation : Wall-mounted

Size : 210/105/185mm, L/W/H



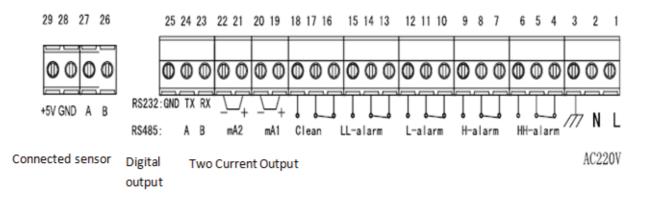
## **Online Turbidity Meter**

#### Dimension:



Immersion sensor Dimensions

### Instrument Wiring:





# Online Turbidity Meter

**HOW TO ORDER** 

Basic Model							ГВD
Mon	surament Chann	ola.					1
1	Single channel	2					1
# Out							₩
Out O	4 ~20MA		RS 485				0
							¢
Power Supply:							AC
AC	220VAC		24VDC				·
Instanta	allation type:						1
0	~ ~		Sampling System				······································
Cable length:							10
C10	10m cable						
							·
Measurement Range:						0/	100NTU
NTU	or mg/L						
Orderir	 ng Example: TBD99-1-						·