# Turbidity

# **14 TR-5500** NEPHELOC, Laser scattered Light Method, Turbidity Monitor

## Measuring Theory



## Linearity features

Turbidity	Display
0	0.0
0.4	0.402
0.8	0.798
1.6	1.601



Density of turbidity standard solution

# Out Line

If 660nm red pulse laser bundle is projected into the sample water, strong scattered light occurs. This scattered light is detected by the light receiving element angled at 90°, transferred to the converter as density signal, calculated, amplified and digitally displayed. Laser turbidity monitor sensitively measures molecule turbidity little influenced by colority.

#### Features

 Laser scattered light method, sensitive turbidity detector

Sensitive of 0.001 measurement of 0.000~2.000

- 3-range manual selection of transmission output 0~ 0.5/0~1.0/0~2.0
- Either PSL or formazine turbidity is possible to measure Span calibration is possible either with polystyrene standard solution or formazine standard solution.
- Simple and reliable zero calibration Reliable zero-calibration system with light source cutout (the first standard)
- Simple and reliable span calibration Simple span calibration by simple span calibration board (the second standard) Standard span calibration is also possible by standard turbidity solution (the first standard)
- Detector and converter of simple fixing and instrumentation
  Detector and converter is separate type and easy to fix and instrument
- With function of checking list of detector's trouble and calibration



## Meter

- Weter	
Product Name	Laser scatter light type Turbidity Monitor
Model	TR-5500
Measuring Method	Laser Scatter light System (Nephelometry Method)
Display	LED 4 figures digital display
Measuring Unit	Formazine Turbidity:NTU
Measuring Range	0.000~2.000 (NTU)
Resolution	0.001
Transmittal Output	DC 4 $\sim$ 20mA (isolated type)
	3 range (Manual change)
	1) 0.000~0.500 NTU
	2) 0.000~1.000 NTU (Initial setting)
	3) 0.000~2.000 NTU
Accuracy	Within ±3 % (Full Scale)
Alarm Point	High, a point of contact(no voltage)
Power Supply	AC 100V 50/60 Hz
Measurement	Temperature : Within 0~40°C
condition	Pressure : About 0.1~0.5MPa
	(at the pressure control valve entrance)
	Discharge flow: About than 0.05ℓ/min
	%No Coexistence (Bubble, Fluoride, Organic solvent)
Connection	Sample entrance : 20A soket
attachment	Sample exit : $\phi 4 \times \phi 6$ PP Tube
Std. component	Meter, Detector, panel fixer, Calibration containers,
	Flow Type Holder, pressure reducing valve, In-line type
	holder, Calibration filter, PP tube, Instruction manual,
	written guarantee
Optional	Pole stand, Turbidity Std Solution, Sunshade cover

### Usage

Turbidity measurement of water purification plants, simplified drinking water facilities, swimming pools, discharging water from the filtration facilities, industrial water, recycled waste water supply, etc. L