

SMART SENSOR

TS7: TURBIDITY & SS

Digital technology for optimized measures

Applications

- Urban wastewater treatment (inlet/outlet controls)
- Sanitation network
- Industrial effluent treatment
- Surface water monitoring
- Drinking water



Optical Technology:

The TS7 Sensor consists of a light source and a light detector (photo detector). Incident light is scattered by the particles in the sample, and the scattered light is measured by the detector. The amount of scattering depends on the amount of material in the sample, the wavelength of light used and the size and composition of the suspended particles. The Sensor uses a long life near infrared LED (880nm) and the 90° scattered light method in accordance with ISO 1027/EN 27027 to assure accurate turbidity values.

An automated mechanical **wiper** is available to remain surface clean and remove air bubbles of the optical window in order to maximize the accuracy and minimize the maintenance requirement.

Turbidity is expressed in nephology-metric units (NTU), which are based on the light-scattering properties of a standardized formazin polymer solution.

GDC-01/02 Transmitter
Single or dual-channels



GDC-04/06/08 Controller
Multi-channels up to eight



GDC-H Transmitter
Handheld Terminal

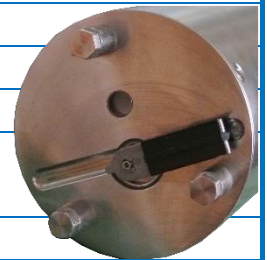


GDC-Ex Transmitter
Single channel Ex-proof

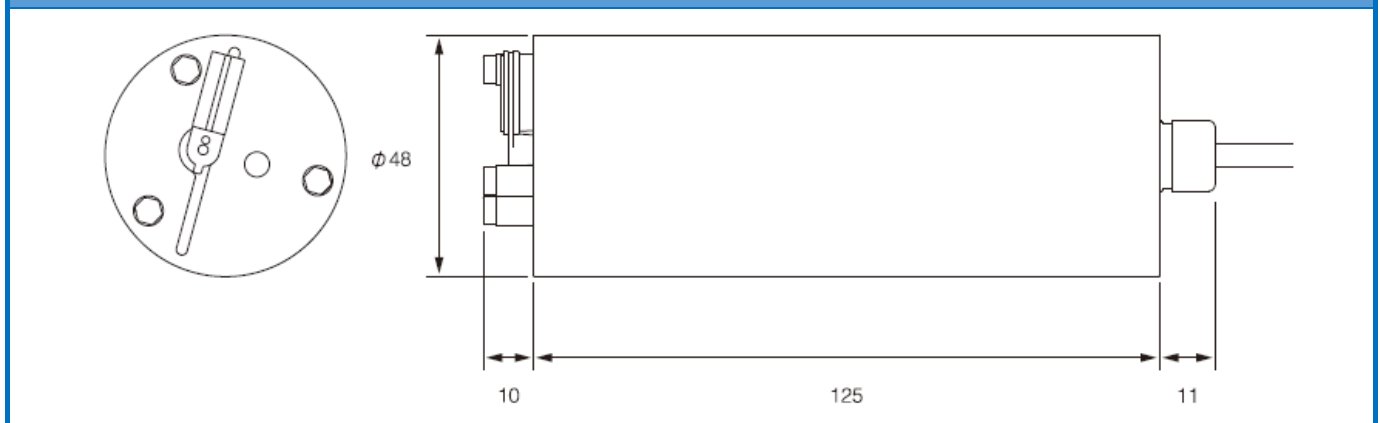


TS7 Turbidity/SS Sensor

TS7	
Principle	Near infrared LED (880nm) and 90° scattered light method in accordance with ISO 1027/EN 27027
Range	0~500/4000NTU 0.00~3000mg/L, 50g/L
Resolution	0.01~1NTU 0.01~1mg/L
Unit	NTU, FTU, ppm, mg/L, g/L
Accuracy	<±1%FS (Turbidity), <±5%FS (SS)
Repeatability	±2%FS
Operate Temp.	0~50°C
Store Temp.	-10~60°C
Protection	IP68
Pressure	5bar
Weight	1.1kg (Sensor & 9 meters cable)
Material	316L, Sapphire Glass
Digital Output	Modbus RS485
Power	24VDC from GDC
Consumption	At regular operation: 50mA(Max) At cleaning operation: 240mA(Max)
Auto-Cleaning	Automatic Wiper cleaning system



DIMENSION (mm)



ORDERING INFORMATION

TS7 Turbidity/SS Sensor		
	-1	0~500NTU (0~3000mg/l)
	-2	0~4000NTU (0~50g/l)
		-C10 10' Cable
		-C20 20' Cable
		-C30 30' Cable
		Please contact factory for other length
TS7	-4	-C10