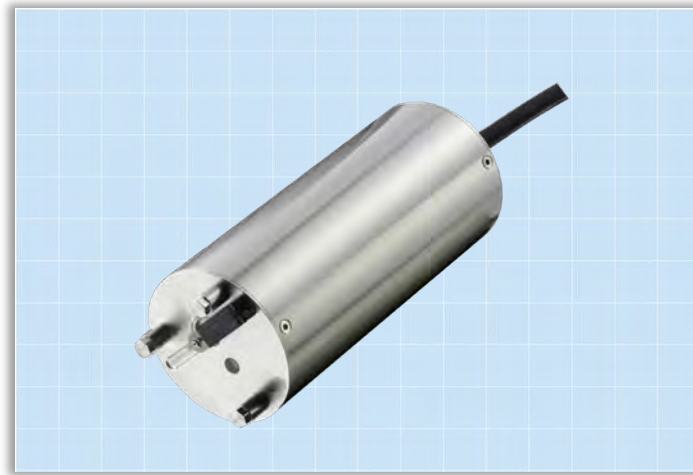


## CROSS SMART SENSOR

### TS7: MLSS Analyzing Sensor

DIGITAL TECHNOLOGY FOR OPTIMIZED MEASURES



#### GENERAL


The **TS7** Sensor is a measuring system best suited to continuously and consistently measure the concentration of Mixed Liquor Suspended Solid (MLSS) in an activated-sludge treatment process found in sewage or industrial wastewater treatment facilities.

The sensor uses a measuring method that compares transmitted light with scattered light. The sensor is designed with due care to the arrangement of the optical system. This design makes the sensor less susceptible to disturbing light. The cleaning wiper unit permits continuous and consistent measurement even in an application where the sensor is exposed to contaminants.

#### APPLICATIONS

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

#### Conform to the following EU Directives & Standards:

	Low Voltage Directive 2014/35/EU
	Electromagnetic Compatibility Directive 2014/30/EU
	RoHS 2 Directive 2011/65/EU
	EN 61010-1:2010; EN 61326-1:2013



## OPTICAL TECHNOLOGY

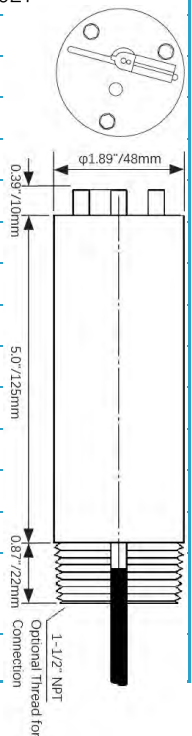
The **TS7** Sensor employs photo detection technology that consists of a light source and a light detector. When the incident light is beamed at the particles in the sample, it is scattered and measured by the detector. The amount of light scattering depends on the amount of material in the sample, the wavelength of light used, and the size and composition of the suspended solids. In accordance with ISO 7027/EN 27027 requirements, the TS7 exploits a long life near infrared (880nm) LED and the 90° scattered light method to assure accurate measurement of turbidity values.



An automated mechanical wiper is readily available to maintain the surface clean and remove any possible air bubbles on the optical window. This helps maximize the measurement accuracy and minimize the maintenance downtime.

## SPECIFICATIONS

Principle	Near infrared LED (880nm) and 90° scattered light method in accordance with ISO 7027/EN 27027
Range	0.00 to 1300 mg/L, 50 g/L, 120 g/L
Resolution	0.1 to 1.0 mg/L
Unit	ppm, mg/L, g/L, NTU, FNU
Accuracy	<±5% FS (SS)
Repeatability	±2% FS
Operate Temp.	32 to 122 °F (0 to 50°C)
Store Temp.	14 to 140 °F (-10 to 60°C)
Protection	Immersible, >IP68
Pressure	5bar
Weight	2.53 lbs (1.1kg Sensor with 30' cable)
Material	316L, Sapphire Glass, Optional Titanium
Digital Interface	Modbus RTU
Power	24VDC by GDC
Consumption	At regular operation: 50mA(Max) At cleaning operation: 240mA(Max)
Auto-Cleaning	Automatic Wiper cleaning system



## ORDER CODE

<b>TS7</b>	MLSS Analyzing Sensor		
	<b>Measuring Range</b>		
	<b>-1</b> 0 to 1250 mg/l	<b>-2</b> 0 to 50 g/l	<b>-3</b> 0 to 120 g/l      Other range contact factory
	<b>Cable Length</b>		
	<b>-C10</b> 10" Cable	<b>-C20</b> 20" Cable	<b>-C30</b> 30" Cable      More length please contact manufactory
<b>TS7</b>	<b>-1</b>	<b>-C30</b>	

*Specifications subject to change without notice.*



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