



Recorder



Flow



Pressure



Temp



Analyzer



Level

Datasheet

Turbidity Sensor

SUP-PSS9010

**Supmea**<sup>®</sup>

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**Datasheet****Turbidity sensor  
SUP-PSS9010**

SUP-PSS9010 is based on the method of combination of infrared absorption scattered light. Infrared light which the photosource sends out scattered by suspended particles in the sample. And finally converted to electrical signals by photoelectric detector and getting the suspended solids concentration of the sample after treatment by analog and digital signals.

The product is widely used in sewage plant, water plant, water station, surface water, farming, industry and other fields

**Applications**

- Water Plant
- Water Station
- Surface Water
- Farming
- Industry

**Features**

- Self-developed optical path and receiving structure,
- Real-time Compensation Algorithm
- Long-term stable online monitoring
- Comes with cleaning brush
- High accuracy turbidity measurement

**Turbidity sensor SUP-PSS9010****Principle**

infrared absorption scattered light method

<b>Parameters</b>	
Measurement Range	0.01-20000 mg/L、0.01-50000 mg/L 、0.01-120000 mg/L
Measurement Accuracy	Less than $\pm 5\%$ of the measured value (depending on sludge homogeneity)
Repeatability	$\pm 2\%$
Resolution Ratio	0.01~1 mg/L, It depends on different ranges
Pressure Range	$\leq 0.4\text{Mpa}$
Flow velocity	$\leq 2.5\text{m/s}$ 、 $8.2\text{ft/s}$
Material	Main Body: SUS316L/Titanium Alloy /PVC Upper and Lower Cover: POM; Cable: PUR
Power Supply	12VDC
Communication Protocol	MODBUS RS485
Operating Temperature	0~45°C (not freeze)
Weight	1.65 KG
Level of Protection	IP68/NEMA6P
Cable Length	Standard 10-Meter Cable, Max Length: 100 Meters

**Wiring**

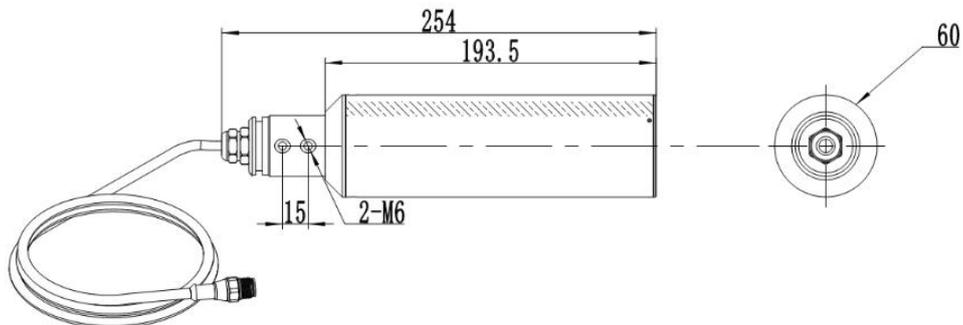
The sensor is properly connected with the following core definitions:

No.	Color	Wiring definition
1	Brown	+12VDC
2	Black	AGND
3	Blue	RS485 A
4	White	RS485 B
5	Yellow + Green	Ground lead

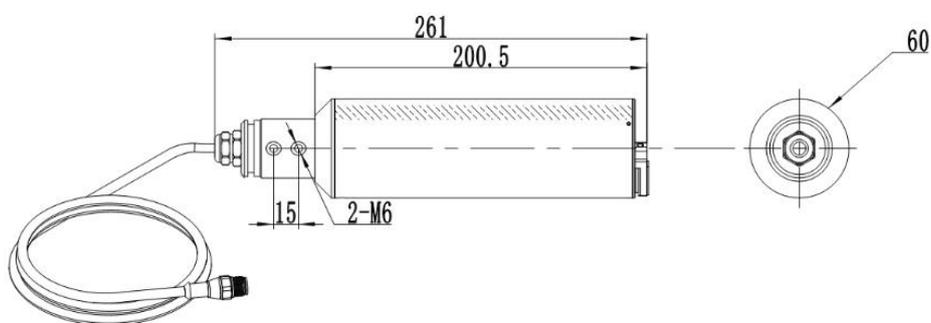
**Dimension**

**SUS316L/Titanium Alloy External Dimension:**

No automatic cleaning device:

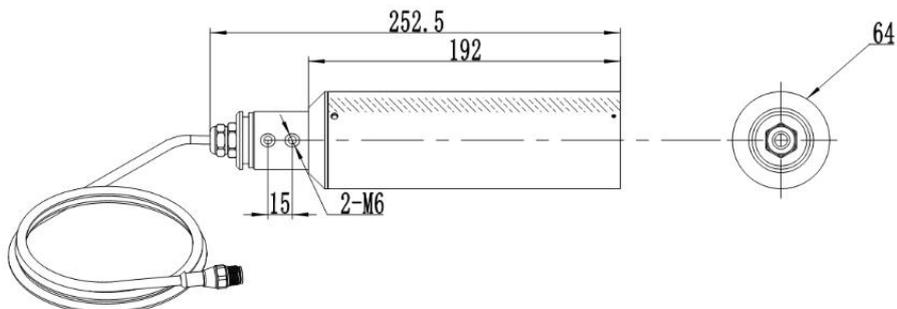


With automatic cleaning device:

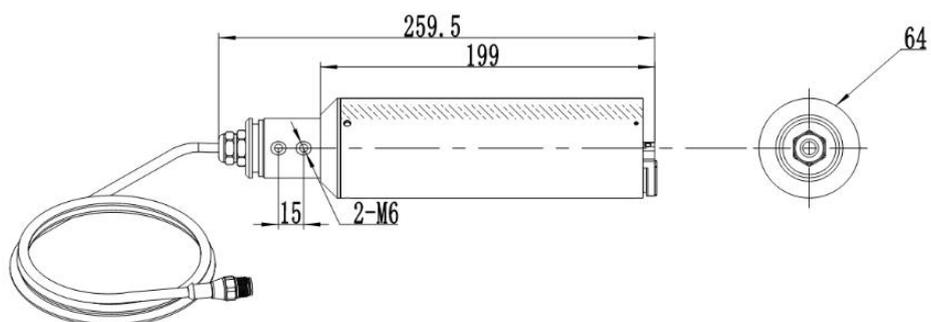


**PVC External Dimension:**

No automatic cleaning device:



With automatic cleaning device:



Ordering code

SUP-PSS9010-WH-M3-0-10										Description	
SUP-PSS9010	-	-	-	-	-	-	-	-	-	-	Temperature range: (0~45)°C
Model	PSS9010										Pressure resistance: 0.2MPa
Measuring range	WH										0.1-50g/L
	XX										Other
Scraper		0									Without
		1									With
Output			A								RS485
Power supply				B							12VDC
											10m
Cable length											20m
											30m
											XX
											Other(<=100m)
Cable connector										ZY	Direct Leads
										HK	Aviation Plug (PSS200 sludge meter only)
Shell material										M3	316LSS
										T1	Titanium Ti