

TURBIDITY SENSOR

Controllers

Sensors

Analysers

Samplers

Flow

Level

Pressure

Web remote control

Data logging

Accessories



General features **S461 TN**

Turbidity refers to the scattered component of a light beam which is diverted away from its natural course by optically denser particles in the medium (e.g. solid matter particles).



The measurement is performed by using a 90° scattered light method compliant with ISO 7027 / EN 27027.

The measuring method is based on the Tyndall effect. The turbidity of the medium is determined by the amount of scattered light.

Applications

Untreated water and well water, surface water, drinking water, process water, industrial and municipal wastewater seawater

Available versions with PVC body, with 4...20mA outputs

2 models available

S461 TN for immersion

S461 TN INS for insertion (in combination with S305-INS)

Technical specifications

Measuring range	0...1000 NTU with autorange
Measuring method	90° Scattered light
Accuracy	±2% at the measuring point range 0...10 NTU ±5% at the measuring point range 0...100 NTU ±10% at the measuring point range 0...1000 NTU
Ripeatability	±0.05 NTU range 0...10 NTU ±0.5 NTU range 10...100 NTU ±5 NTU range 100...1000 NTU
Response time	$T_{90} < 60s$
Operating temperature	0...50 °C
Maximum pressure	4 bar
Body material	Black PVC and SS316 (on request only SS316)
O-ring	Viton® and Silicon
Optics	Special Glass with oleophobic treatment
Mechanical protection	IP68 Sensor + cable
Power supply	12...24Vdc
Power consumption	max. 3W
Cable	10 mt integral with the sensor
Calibration	1-point for scale with formazin standard solution
Signal interface	Modbus RTU Standard Protocol RS485 (4...20mA optional)



S305-INS
probeholder
for insertion
into the pipe