



# SoliTechw<sup>2</sup> IR Sensors

## Suspended Solids Sensor - Portable Use

PRODUCT DATASHEET

### APPLICATIONS

Suspended Solids Monitoring  
Mixed Liquor (MLSS)  
Aeration Basin  
Oxidation Ditch  
Returned Activated Sludge  
Surplus Activated Sludge  
Final Effluent Suspended Solids  
Sludge Blanket Level  
Filter Breakthrough Monitoring  
Activated Sludge

### FEATURES

Robust Design  
Simple to use  
Low cost of Ownership  
High Sensitivity

### COMPATIBLE SENSORS

750w<sup>2</sup> Monitor



Partech's range of SoliTechw<sup>2</sup> IR infrared sensors can be used for the measurement of suspended solids, sludge density, and turbidity in a wide range of applications, which includes Mixed Liquor (MLSS), Total Suspended Solids (TSS) and Sludge Blanket Detection.

The sensor has been designed as a robust and accurate method of portable detection. The machined housing provides excellent resistance to impact, temperature and chemical attack and the only maintenance required is periodic cleaning of the optical surfaces.

The SoliTechw<sup>2</sup> IR sensors are connected to the 750w<sup>2</sup> Portable unit via a high quality IP68 connector. The sensors are interchangeable, allowing a customer to use the same 750w<sup>2</sup> portable unit at different locations with different sensors.

The SoliTechw<sup>2</sup> IR Sensors come in 4 different ranges to maximise accuracy over a diverse range of applications. The 750w<sup>2</sup> and SoliTechw<sup>2</sup> IR combination make this the most flexible Suspended Solids, Turbidity and Sludge Density portable product range available on the market.

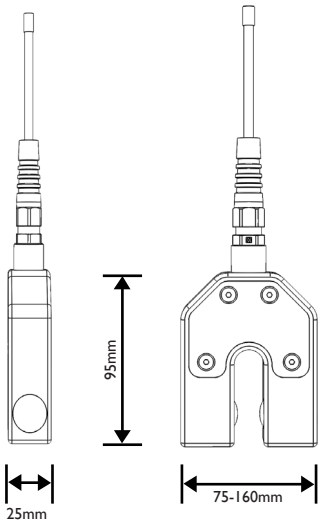
Call us on + 44(0) 1726 879800 [www.partech.co.uk](http://www.partech.co.uk)



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### Physical

Dimensions  
Weight  
Nominal Gap Size

95 x 25 mm (H x D)  
0.7 kg inc 5m of cable  
0-200 mg/l Range: 100 mm  
0-1,500 mg/l Range: 40 mm  
0-10,000 mg/l Range: 15 mm  
0-30,000 mg/l Range: 8 mm

Protection Class  
Enclosure Material  
Cable Connection  
Cable Length  
Cable Type  
Service Requirement

IP68  
Black Acetal Co-Polymer  
4 Way Circular Plug  
10 metres standard, 100 metres maximum  
4 core, 2 twisted pair 5mm O/D Polyurethane Coated  
No routine servicing

### Environmental Data

Operating Temperature

0 to 60°C

### Measurement

Measurement Principle  
Wavelength  
Units

Light Attenuation  
960 nm  
mg/l, g/l %, NTU, FTU, FNU, FAU

### Sensor Selection

#### SoliTechw<sup>2</sup> IR Sensor 0 - 200

Range  
Accuracy  
Limit of Detection  
Minimum Operating Range

0 - 200  
±5% of measured value or ±1 mg/l whichever is greater  
1 mg/l  
0 - 20 mg/l

#### SoliTechw<sup>2</sup> IR Sensor 0 - 1,500

Range  
Accuracy  
Limit of Detection  
Minimum Operating Range

0 - 1,500  
±5% of measured value or ±7.5 mg/l whichever is greater  
7.5 mg/l  
0 - 150 mg/l

#### SoliTechw<sup>2</sup> IR Sensor 0 - 10,000

Range  
Accuracy  
Limit of Detection  
Minimum Operating Range

0 - 10,000  
±5% of measured value or ±50 mg/l whichever is greater  
50 mg/l  
0 - 1000 mg/l

#### SoliTechw<sup>2</sup> IR Sensor 0 - 30,000

Range  
Accuracy  
Limit of Detection  
Minimum Operating Range

0 - 30,000  
±5% of measured value or ±150 mg/l whichever is greater  
150 mg/l  
0 - 3000 mg/l

\*Suspended Solids Range is dependent on the sample being measured.

For the purposes of this datasheet: 1NTU=1FTU=1FNU=1FAU

### Order Codes

#### Part No Description

- 228934 SoliTechw<sup>2</sup> IR Sensor for 750w<sup>2</sup> Monitor (Range 0-200, Cable Length 5m)
- 228935 SoliTechw<sup>2</sup> IR Sensor for 750w<sup>2</sup> Monitor (Range 0-1,500, Cable Length 5m)
- 228808 SoliTechw<sup>2</sup> IR Sensor for 750w<sup>2</sup> Monitor (Range 0-10,000, Cable Length 5m)
- 228933 SoliTechw<sup>2</sup> IR Sensor for 750w<sup>2</sup> Monitor (Range 0-30,000, Cable Length 5m)

(10 metre cable also available)

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The company reserves the right to alter the specification without prior notice. E&OE

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