

SoliTech IR Sensors (Suspended Solids Sensors)

The SoliTech Infrared (IR) Sensors measure total suspended solids, sludge density and turbidity by producing an infrared signal that is reduced by the thickness of the sludge, making them ideal for a range of applications including mixed liquor suspended solids, total suspended solids and sludge blanket detection.

The sensors provide a robust and accurate method of TSS detection. The machined housing provides excellent resistance to impact, temperature and chemical attack. The only maintenance required is periodic cleaning of the optical surfaces.

SoliTech IR Sensors come in four ranges to maximize accuracy across multiple wastewater applications. With portable and fixed-installation options, SoliTech IR Sensors provide a complete solution.

Take manual measurements with the 750 Portable Monitor.

Connect the sensors to a 750 Portable Monitor via a high-quality IP68 connector for instant suspended solids, turbidity and sludge density spot-check readings.

Connect to the 7300 Monitor for continuous sludge blanket detection.

SoliTech IR Sensors are also available with a stripped-and-tinned cable termination to connect to the 7300 Monitor for continuous sludge blanket level monitoring, with easy transmission to a control system and a simple radio integration if needed. The system can be mounted outdoors on the settlement tank bridge using an IP65-rated enclosure.

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FEATURES

- Low-contamination design
- Enhanced reliability
- Simple operation
- Low cost of ownership
- High sensitivity

COMPATIBLE MONITORS

- 750 Portable Monitor
- 7300 Monitor



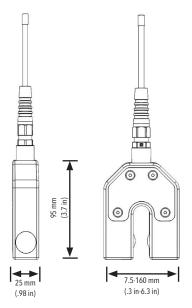
Applications:

- 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



SoliTech Sensor

,	5 ft) of cable nm (optical path) mm (optical path) 5 mm (optical path)	CABLE TYPE CABLE LENGTH OPERATING TEMPERA PROTECTION CLASS	ATURE	4 core, 2 twisted pair 5 mm 10 m (33 ft) standard, 100 0 to 50°C (32F to 122F) IP68	n (.20 in) O/D Polyurethane Coated m (328 ft) maximum	
200 mg/l Range: 100 m 1,500 mg/l Range: 40 r 10,000 mg/l Range: 15 30,000 mg/l Range: 8 r ght Absorption	nm (optical path) mm (optical path) 5 mm (optical path)	OPERATING TEMPERA	ATURE	0 to 50°C (32F to 122F)	m (328 ft) maximum	
1,500 mg/l Range: 40 r 10,000 mg/l Range: 15 30,000 mg/l Range: 8 r ght Absorption	mm (optical path) 5 mm (optical path)		ATURE	· · ·		
10,000 mg/l Range: 15 30,000 mg/l Range: 8 r ght Absorption	6 mm (optical path)	PROTECTION CLASS		IP68		
,						
,						
50 nm		Light Absorption				
950 nm						
g/l, g/l %, NTU, FTU, FNU	J, FAU					
TPOINT	TYPICAL APPLICATIONS	RANGE	LIMIT OF DETECTION	MINIMUM OPERATING RANGE	ACCURACY	
% to 95% of range	Sewage Treatment Thickeners	0 - 30,000 mg/l	150 mg/l	0 - 3000 mg/l	\pm 5% of measured value or \pm 150 mg/l whichever is greater	
% to 95% of range	Water Treatment Sludge Thickeners Sewage Treatment Primary Tanks	0 - 10,000 mg/l	50 mg/l	0 - 1000 mg/l	$\pm 5\%$ of measured value or ± 50 mg/l whichever is greater	
% to 95% of range	Water Treatment Clarifiers Sewage Treatment Final Settlement Humus Tanks	0 - 1,500 mg/l	7.5 mg/l	0 - 150 mg/l	\pm 5% of measured value or \pm 7.5 mg/l whichever is greater	
% to 95% of range	Water Treatment	0 - 200 mg/l	1 mg/l	0 - 20 mg/l	$\pm 5\%$ of measured value or ± 1 mg/l whichever is greater	
2 years						
g// 6 t 6 t 6 t	I, g/l %, NTU, FTU, FNI POINT to 95% of range to 95% of range to 95% of range to 95% of range	TYPICAL APPLICATIONS POINT TYPICAL APPLICATIONS to 95% of range Sewage Treatment Thickeners to 95% of range Water Treatment Sludge Thickeners to 95% of range Water Treatment Clarifiers to 95% of range Water Treatment Clarifiers to 95% of range Water Treatment Final Settlement to 95% of range Water Treatment Clarifiers sewage Treatment Final Settlement Humus Tanks to 95% of range Water Treatment	Note: Sewage Treatment Thickeners RANGE POINT TYPICAL APPLICATIONS RANGE io 95% of range Sewage Treatment Thickeners 0 - 30,000 mg/l io 95% of range Water Treatment Sludge Thickeners 0 - 10,000 mg/l io 95% of range Water Treatment Clarifiers 0 - 1,500 mg/l io 95% of range Water Treatment Final Settlement 0 - 200 mg/l io 95% of range Water Treatment Clarifiers 0 - 200 mg/l	Numerical Section S	Numerical Section S	



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