

ASLD 2200 Sludge Blanket Monitor



Partech Instruments is a specialist company providing analysers and instruments for monitoring and control in; wastewater, raw water, industrial effluent and surface water applications.

Whatever the application and whatever the location, Partech will supply an effective and efficient service and a support package tailored to suit the customer

The ASLD 2200 is a fully automatic sludge blanket level detector primarily designed for the water and waste water industry but could be applied to other types of process. It utilises a servo-driven sensor which continually tracks the settled interface and produces a 4-20 mA output which is proportional to the depth of the blanket.

A range of sensors are available to allow the ASLD to work on a variety of settlement tanks. All the sensors are of the infrared gap type, the normal sensors selections are:

Nominal Range 0-1,500 mg/l: Final or Secondary Settlement Tanks

Nominal Range 0-10,000 mg/l: Primary Settlement Tanks

Nominal Range 0-30,000 mg/l: Sludge Thickeners.

The use of infrared attenuation as the principle of operation for the sensor allows Partech to ensure sufficient sensitivity to monitor sludge blankets in a wide variety of applications. It should be noted that sensor selection can be site dependent, Partech are happy to provide full support in the selection of the correct sensor.

Provision must be made for transmission of the output signal to the control system; this is normally possible via spare slip rings. Where this is not possible a radio telemetry option is available, allowing transmission directly to the control system without the need for installation of cables.



The ASLD 2200 has a number of key parts that are integrated into a single system that must be mounted on the bridge of the settlement tank to ensure reliable operation.

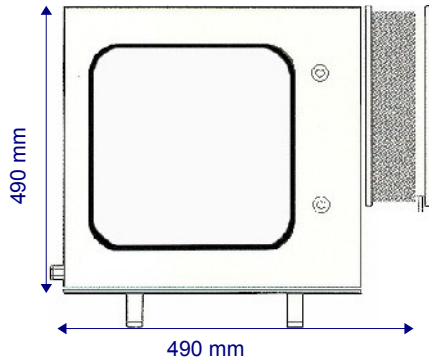
The basic principle of operation is that the sensor cable is wound on a motorised drum. Initially the sensor will be in the clear supernatant at the top of the tank. The electronics will direct the motor to move the sensor downward to find the interface. Once the sensor meets the interface the sensing path becomes obscured which in turn causes the motor to withdraw the sensor until the sensor is just clear of the interface. The sensor will now follow the top of the interface as it rises and falls.

In application where the scraper or Picket Fence moves independently of the bridge the ASLD 2200 can accept control input to automatically raise and lower the sensor. Specific application advice from Partech is recommended before carrying out this type of installation.

Compatible Sensors

- Soli-Tech 20 Sensor
- Infrared Sensors

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Physical

Weight	18 kg
Dimensions (h x w x d)	490 x 490 x 290 mm
Enclosure Rating	IP55 Outer Enclosure with IP65 Electronics Housing
Enclosure Material	GRP Outer with Polycarbonate Inner
Cable Entries	3 x PG11 (cable 5 to 10 mm)
Cable Size	Max Conductor Cross Section 2.5 mm ²

Environmental Data

Operating Temperature	0 to 50°C
Storage Temperature	0 to 50°C
Location	Indoor or Outdoor

Power Supply

Voltage	115/230 VAC +10/-15% Field Selectable
Power Consumption	25VA
Fuse	1 A

Analog Output

Number	1
Type	4-20 mA, maximum load resistance 600 ohm

Measurement Details

Response Time	5 second delay, tracks blanket at 1 metre per minute
Accuracy	Typically +/-5%
Resolution	+/- 100 mm

Accuracy and resolution statements are dependent on the settling characteristics of the solids and can vary during operation of the plant.

Relay Outputs and Set Points

No	1
Contacts	Contact Closure
Rating	0.5A @ 100 VDC
Type	Zero/100% Indication
Adjustment	Not Adjustable
Local Annunciation	6 LED's on Main CCA

User Interface

Display	3 Digit, 7 Segment LED Display of 0-100%
Setup	Potentiometer and Push Buttons on main CCA
Units of Measurement	%age Depth

Software

Remote Programming	No
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Mounting

Type	Requires bracket to mount on Handrail
Bracket/Plate	Part Number 101170 for attachment to handrail

Approvals

EMC Standard	EN50082-1 (1994) Residential, Commercial, Light Industry
EMC Directive	89/336/EEC
Low Voltage Directive	73/23/EEC

Part Numbers

- 167430 ASLD 2200 Monitor
- 117170 Encoder Disc 1 Blade*
- 117180 Encoder Disc 2 Blade*
- 117190 Encoder Disc 4 Blade*
- 121950 Encoder Disc 6 Blade*
- 121960 Encoder Disc 8 Blade*
- 179120 Soli-Tech 20, Sensor
0-1,500 mg/l Range
- 179140 Soli-Tech 20 Sensor
0-10,000 mg/l Range
- 179160 Soli-Tech 20 Sensor
0-30,000 mg/l Range
- 101170 Mounting Bracket

* Check with Partech for the correct encoder disc for your application



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Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.



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Please note - Product designs and specifications are subject to change without notice. The user is responsible for determining the suitability of this product.