

## 8200 Monitor for Sludge Blanket Detection



*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 8200 Monitor provides a reliable method of detecting the sludge blanket in settlement tanks or increasing levels of suspended solids or sludge density in a large range of processes.

Control of the sludge blanket is essential to ensure discharge consent compliance and efficient control of the treatment process. If the blanket in a settlement tank is allowed to rise to close to the surface there is a danger that solids will leave the tank and contaminate the next process stage or be discharged into the water course. Alternatively if the sludge blanket is not allowed to stabilise and form a blanket or is pumped out too frequently the settlement process does not take place at all and solids will remain in suspension. Additionally there is a danger that thin sludge or water will be pumped from the bottom of the tank into the sludge handling system thus reducing the effectiveness of that process.

The 8200 Monitor is suitable for mounting outdoors on the bridge of settlement tanks, the enclosure is IP65 rated and no outer enclosure is required. 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 8200 Monitor is designed to work with Partech's range of infrared sensors to provide an alarm output to aid in the control of Sludge Blanket/Water interfaces found in a variety of settlement tanks.

The 8200 Monitor operates with two sensors each of which produces a high alarm signal to indicate the presence of a sludge blanket at the point where they are located. An additional system fault alarm is also provided. The alarm signals can be used to provide a two stage alarm or to start and stop a pump.

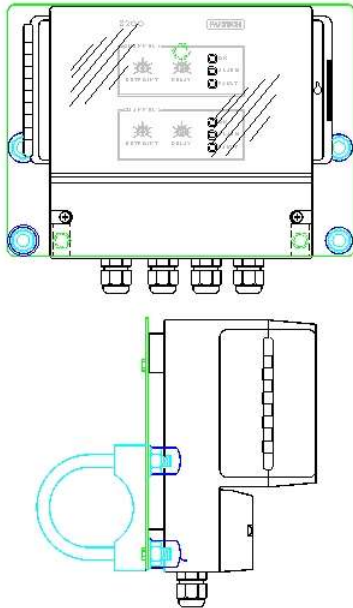
The correct selection of infrared sensor enables the detection of the sludge/water interface on Final Settlement Tanks or Primary Tank even when the settlement process is 'upset' and the interface has become disturbed.

Guidance on sensor selection can be found on both the sensor datasheet and from your Partech representative.

### Compatible Sensors

- Soli-Tech 20 Sensor
- Infrared Sensors

## 8200 Monitor for Sludge Blanket Detection



**Monitor shown with mounting bracket part number 171280**

### Part Numbers

|        |  |
|--------|--|
| 163010 | 8200 Monitor                             |
| 171350 | 8200 Monitor, 115VAC Power Supply Option |
| 171370 | 8200 Monitor, 12VDC Power Supply Option  |
| 171360 | 8200 Monitor, 24VDC Power Supply Option  |
| 171280 | Mounting Bracket for 8200 Monitor        |



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

### Physical

|                        |   |
|------------------------|---|
| Weight                 | 1 kg  |
| Dimensions (h x w x d) | 160 x 195 x 105 mm                              |
| Enclosure Rating       | IP65  |
| Enclosure Material     | ABS   |
| Cable Entries          | 4 x PG11 (cable 5 to 10 mm)                     |
| Cable Size             | Max Conductor Cross Section 2.5 mm <sup>2</sup> |

### Environmental Data

|                       |                   |
|-----------------------|-------------------|
| Operating Temperature | -20 to 60°C       |
| Storage Temperature   | -20 to 60°C       |
| Location              | Indoor or Outdoor |

### Power Supply

|                   |   |
|-------------------|---|
| Voltage           | 115/230 VAC +10/-15% Field Selectable, 12/24 VDC option |
| Power Consumption | 8W  |
| Fuse              | 100 mA  |

### Analog Output

Number 0

### Measurement Details

|               |                 |
|---------------|-----------------|
| Response Time | 1 to 90 seconds |
|---------------|-----------------|

### Relay Outputs and Set Points

|                    |   |
|--------------------|---|
| No                 | 3   |
| Contacts           | SPCO  |
| Rating             | 5A @ 230 VAC, 5A@125 VDC  |
| Type               | 2 High Blanket Alarms one per sensor, 1 Fault Alarm                               |
| Adjustment         | 5 - 95% Sensor Range  |
| Local Annunciation | Green LED for Normal, Red LED for Blanket Alarm (per channel) Amber LED for Fault |

### Serial Communications

|          |         |
|----------|---------|
| RS232    | Pending |
| Modbus   | Pending |
| Profibus | Pending |

### User Interface

|         |                              |
|---------|------------------------------|
| Display | 2 Groups of 3 LED's          |
| Setup   | Front Panel Trim Adjustments |

### Software

|                    |    |
|--------------------|----|
| Remote Programming | No |
|--------------------|----|

### Mounting

|               |   |
|---------------|---|
| Type          | Surface                                       |
| Bracket/Plate | Part Number 171280 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  |



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.