



# IR 'C' Sensors

## Suspended Solids and Turbidity Sensors

PRODUCT DATASHEET

### SENSOR RANGES

IR100C – 0-200 mg/l  
IR40C – 0-1,500 mg/l  
IR15C – 0-10,000 mg/l  
IR8C – 0-30,000 mg/l

### PRINCIPAL OF OPERATION

Infrared Light Attenuation  
950 nm Wavelength

### APPLICATIONS

Environmental Research  
Sediment Transfer  
Glacial Stream Monitoring

### FEATURES

Low Cost  
Easy to Use  
Simple interface to range of logging devices

### BENEFITS

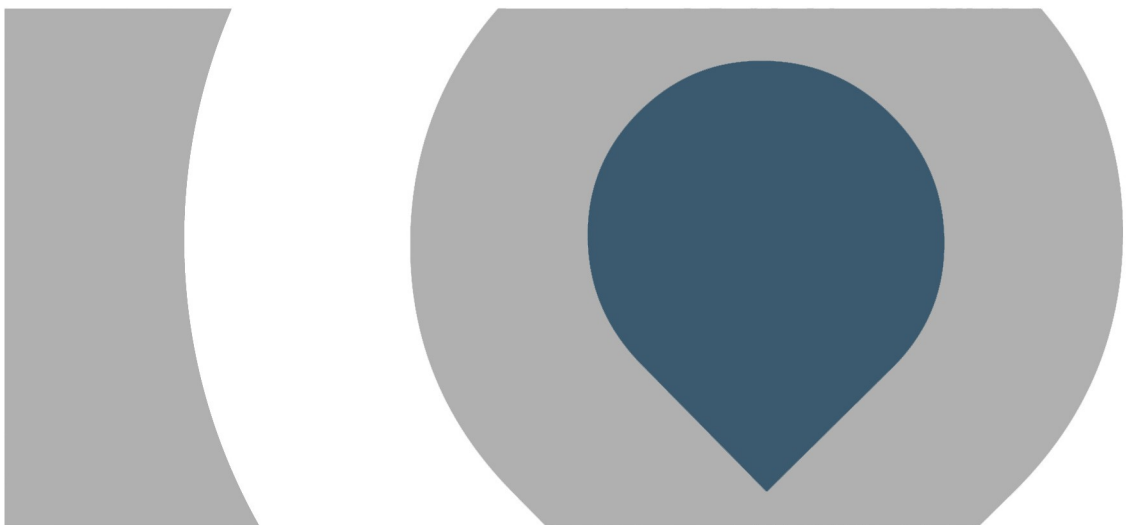
Long term Suspended Solids trend reporting  
Vastly reduced laboratory analysis  
24/7 trending not spot sampling



The IR 'C' version of Partech's trusted range of infrared based Suspended Solids and Turbidity sensors is aimed at applications in the environmental monitoring and research fields. It has been specifically developed to work with a wide range of data logging devices that are in common use in universities and research organisations. The sensor produces an output signal that can be calibrated either within the logger or via a spreadsheet to provide a linear response to the actual solids present in the water being monitored.

The sensors have provided data for a multitude of academic papers in applications from Glacial Streams in the Alps, through Tropical Rainforest Rivers in Borneo to Melt Water in Greenland and sediment transport in the Humber Estuary. Many theses and doctoral reports have been produced using the IR 'C' sensors.

Being exceptionally easy to deploy and having a very low power consumption there are no hidden costs to the purchase of these sensors. Partech are happy to put together a monitoring package including a logger, power source and weatherproof enclosure. These packages will allow data to be retrieved without visiting the site, keeping project costs down and allowing measurements over wide areas.



Call us on 01726 879800 [www.partech.co.uk](http://www.partech.co.uk)

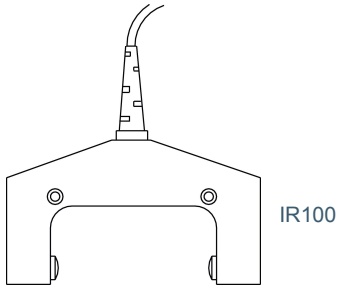




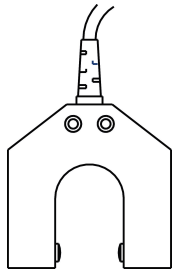
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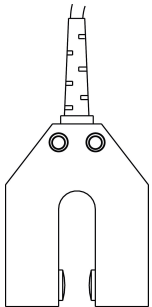
PRODUCT DATASHEET



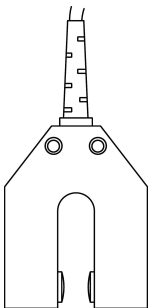
IR100



IR40



IR15



IR8

### Physical

Protection Class  
Material of Construction

IP68  
Epoxy Potting Compound  
Hastelloy Lens Holders  
4-core, Polyurethane Coated  
5 mm  
10 metres standard, 100 metres maximum

Cable Type  
Cable Size  
Cable Length

### Electrical

Power Supply

12VDC

### Environmental

Operating Temperature Range  
Storage Temperature Range

0-40° C  
0-50° C

### Measurement

Measuring Principle  
Wavelength

Infrared Light Absorption  
950 nm

### Sensor Details

	IR100	IR40	IR15	IR8
Nominal Range (mg/l) *	200	1500	10,000	30,000
Optical Path (mm)	100	40	15	8
Weight (g)	350	300	250	250
Width (mm)	160	100	75	75
Height (mm)	95	95	95	95
Depth (mm)	25	25	25	25

\* Actual sensor range is dependent on the solids being monitored

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

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