

# 715 Portable Sludge Blanket Detector



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*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 715 Portable provides a simple, low cost method of spot checking the sludge blanket level in a wide variety of settlement tanks. The cable reel design enables the user to store the cable without needing additional carrying bags or cleaning materials.

The sludge blanket is detected by winding the sensor down into the tank, the audible tone will change and the LED illuminates once the sensor has reached the blanket. The markings on the sensor cable are then used to determine the depth of the blanket. Additional markings can be added to the cable to pre-define maximum and minimum sludge blanket positions.

No user adjustment is necessary, the 715 Portable can be used straight from the box, although adjustment of the set point is available internally. The only spare part necessary is a 9V battery.

Reliable detection of the sludge interface is necessary to allow operators to de-sludge tanks at the right time. Emptying the tank too often is inefficient in terms of manpower and can have knock on effects on the operation of other parts of the sludge treatment system. Equally allowing the tank to have too much sludge can cause carry over to the next process stage or into the local watercourse. Neither of these scenarios is desirable, and the 715 will provide a quick and easy check on the interface position without relying on operator judgment.



The 715 Portable uses a range of infrared sensors to make the sludge interface detection. Infrared attenuation has been selected as it is ideally suited to detecting the sludge present in the interface zone. This tends to be considerably 'thinner' than the sludge that is present at the bottom of a settlement tank.

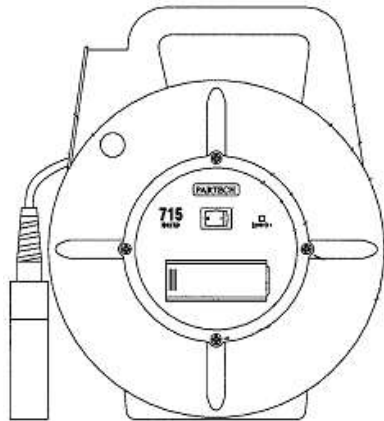
The sensor should be selected to suit the intended application. The IR40 sensor is the most commonly used sensor and will cover most applications, involving Primary and Secondary Settlement Tanks on sewage treatment works. If the main use is to be on Primary Tanks then the IR15 sensor should be used.

An alternative to the 715 is the 740 Portable Monitor which works with the Soli-Tech 10 Sensor to monitor both Suspended Solids and the Sludge/Water interface. This instrument can be useful in providing a picture of the solids profile through a settlement tank. It can also be used to detect the location of the sludge interface.

#### **Compatible Sensors**

- Infrared Sensors

# 715 Portable Sludge Blanket Detector



## Physical

Weight	1.2 kg
Dimensions (h x w x d)	280 x 230 x 130 mm
Enclosure Rating	Electronics IP54, Sensor IP68
Enclosure Material	Dark Blue Nylon
Cable Entries	via integral grommet
Cable Size	5 mm
Cable Length	10 metres standard, 15 metres maximum

## Environmental Data

Operating Temperature	Electronics -20 to 60°C, Sensor 0 - 40° C
Storage Temperature	Electronics -20 to 60°C, Sensor 0 - 40° C
Location	Indoor or Outdoor

## Power Supply

Voltage	9 V PP9 Battery
Battery Life	3 months typical use

## Analog Output

Number	0
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## Measurement Characteristics

Response Time	0.5 seconds
Accuracy	+/- 1 cm of interface
Resolution	Standard cable marking every 1.0 metres
Measurement Principle	Light Attenuation
Wavelength	960 nm

## Sensor Selection

Settlement Tank	IR100 Sensor - Special Applications Only
	IR40 Sensor - WTW Clarifier, STW Final Settlement
	IR15 Sensor - WTW Thickener, STW Primary Settlement
	IR8 Sensor - STW Thickener

## User Interface

Display	Front Panel LED – 'ON' in Sludge
Audible Output	Short Tone in Water
	Long Tone in Sludge

Setup	None required
Units of Measurement	metres

## Mounting

Type	Portable
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## Approvals

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

## Part Numbers

107800	715 Portable, IR100 Sensor
100610	715 Portable, IR40 Sensor
107790	715 Portable, IR15 Sensor
141300	715 Portable, IR8 Sensor





Thank you for reading this data sheet.

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



**UK Office**

**Keison Products,**

**P.O. Box 2124, Chelmsford, Essex, CM1 3UP, England.**

**Tel: +44 (0)1245 600560**

**Fax: +44 (0)1245 600030**

**Email: [sales@keison.co.uk](mailto:sales@keison.co.uk)**

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