

# Suspended Solids Sensor Submersible design



■ **Wide application range**

- Monitors suspended solids in raw sewage, primary clarifier effluent, MLSS, RAS, filtrate, sewer losses, etc

■ **Stable measuring principle**

- Built-in temperature compensation loop
- Measurement by NIR-light

■ **Low maintenance**

- Durable stainless steel sensor head
- Wide 20 mm (3/4") measuring gap
- Flushing system with no moving parts

■ **Easy to use**

- Calibration with lab test in mg/l (ppm)

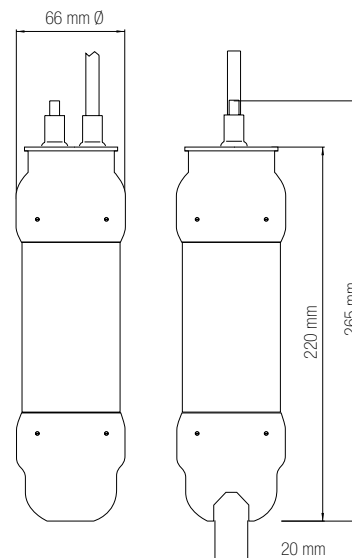
## CERLIC ITX

The **ITX Suspended Solids Sensor** is the ultimate tool for effective process control. The sensor is used for continuous measurement of suspended solids in aeration basins (MLSS), return sludge troughs, SBR-systems, raw sewage, primary clarifier effluent and sewer monitoring in industrial plants. The sensor is an integral part of controlling solids retention time (SRT) or sludge age. The measuring principle is a single beam of pulsed

NIR-light. The LED light source pulses at 880 nm and has a guaranteed life of at least three years. In each installation the meter is calibrated using actual lab tests for up to five pbe42/505 sample points. An automatic cleaning system with built-in flushing nozzles ensures accurate measurements with little maintenance.

### TECHNICAL SPECIFICATIONS

<b>Material</b>	SIS2343 (316SS)	The sensor is manufactured in stainless steel which limits corrosion. The head of the sensor is designed to achieve the highest self-cleaning effect.
<b>Weight</b>	1.6 kg (3.5 lbs)	
<b>Cable</b>	10 m (33 ft)	The cable is made of Hytrel and is highly resistant to aggressive materials and fluids.
<b>Enclosure</b>	IP 68 (NEMA 6)	
<b>Process temp.</b>	0 - +60°C (32 - 140°F)	
<b>Measuring Principle</b>	Straight transmission 20 mm measuring line	The detected measuring signal is inversely logarithmical proportional to the consistency or suspended solids. Particals will not be stucked. Lens in glass.
<b>Measuring range</b>	Min 0 - 500 mg/l (ppm) Max 0 - 20 000 mg/l (ppm)  GaAs, Diod, 880 nm	ITX measures transmitted light which facilitates a zero-point calibration. At 880 nm no colours can be seen which eliminates a source of error.
<b>Resolution</b>	± 1 mg/l (ppm)	
<b>Accuracy</b>	± 0,5%	FS or of chosen range.
<b>Mounting</b>	In liquid	Immersion of sensor in liquid, see accessories for alternatives.
<b>Cleaning</b>	Air or water	Flush pressure max 6 bar (87 psig). For air 2 bar (29 psig) is usually sufficient.
<b>Flushing hose</b>	1/4" pvc, 10 m (33 ft)	
<b>Accessories:</b>		Telescopic rod, 4 m, incl. transmitter holding. Aluminium mounting plate. Solenoid valve for flushing. Mounting bracket.



### ITX

**BB1/BB2 Control Box** All our sensors in the X-series can be combined and connected to a Control Box; BB1/BB2. The Control Box is equipped with the latest in communication protocols for compatibility with a wide array of automation systems. The control box comes with two 4 - 20 mA outputs as standard. BB1 supports one sensor. BB2 can support up to four

sensors for 4 - 20 mA or Profibus DP output signals. Relay outputs in the BB1/BB2 are used for high and low alarms or to provide a pulse for automatic cleaning for sensors with that function. Further information can be found in our leaflets for BB1/BB2.