

# Optical High Suspended Solids Meter 1" Flow thru Design



## ■ Easy to Calibrate

Calibrated to process liquid with lab test  
Zero calibrated with water  
Up to five (5) calibration points, available

## ■ Rugged Design

Operating pressure to 365 psig at 194° F (90° C)  
316SS construction with sapphire lenses

## ■ Repeatable & Accurate Measurement

Not effected by flow, temperature or pressure changes

## ■ Wide Measuring Range

Up to 70% suspended solids but dependent on type of solids  
Measures particles 0.88 microns and larger

## ■ Low Maintenance Costs

No moving parts  
Self cleaning design

## ■ LED Compensation Loop

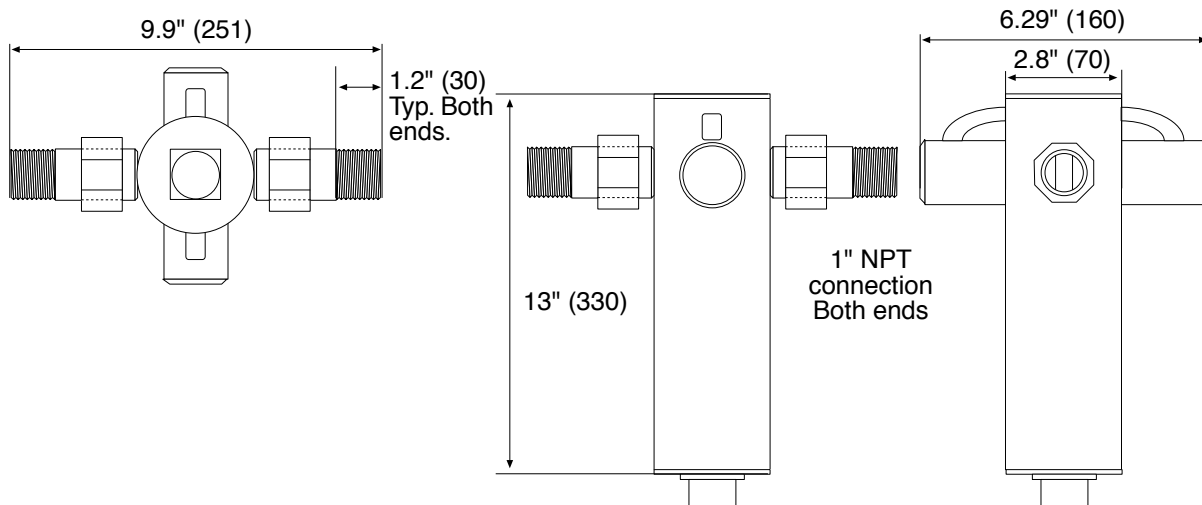
Alleviates LED light source drifting & frequent recalibration

**The CTX03/25** has been developed to measure high concentrations of suspended solids in liquids thru a 1/8" (3 mm) gap. Combined with the digital BB2 control box for signal processing, The CTX03/25 measures all suspended solids particles that are 0.88 microns and larger. It has a wide measuring range for applications in the industrial and municipal markets to measure suspended solids for process control and monitoring. The CTX03/25 is constructed of 316SS with sapphire lenses and supplied with 1" npt couplings for mounting to your process or bypass line. The SS couplings allow for easy removal for the sensor for inspection. The transmitter has a 1/8" (3mm) gap between the lenses, which produces a self-cleaning effect due to the increased velocity.

This provides for precise and reliable measurement with minimum maintenance, even in critical applications. The CTX03/23 measures light transmitted through the liquid. The measuring principle is based on the ability of suspended solids to absorb and reflect NIR-light (Near Infra Red). The light source consists of a transmitting LED diode, which is pulsed with high intensity light thru the liquid. The ration of the received light is an inverse logarithmic regression to the concentration of suspended solids. The processing of the measuring signal take place in the BB2 control box and generates a linearized 4-20 mA outputs signal relative to suspended solids concentration.

## Technical specifications

<b>Material</b>	316 (SIS2343) Housing
<b>Lenses</b>	Sapphire (Diamond Hardness 9)
<b>Pressure Rating</b>	365 psig (PN25)
<b>Process Temp.</b>	32...194°F (0...+90°C)
<b>Light Source</b>	GaAs diode 880 nm, monochromatic
<b>Measuring Principle</b>	Straight transmission, 0.125" (3mm) gap
<b>Weight</b>	7.5lbs (3.4kg)
<b>Measuring Range</b>	0-70% suspended solids Depending on type of suspended solids
<b>Flow Rates</b>	Min. 3 gpm (10 l/min)



CTX 03/25

**Cerlic's product line** contains sensors for measuring and monitoring your process. Our instruments are used in municipal waste water & water treatment plants, industrial plants and

paper mills for process control. The development of our digital BB2 product line is the result of increasing demand for instrumentation that is reliable, accurate and durable design.



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