

# Insite IG Model 1500

## SUSPENDED SOLIDS ANALYZER

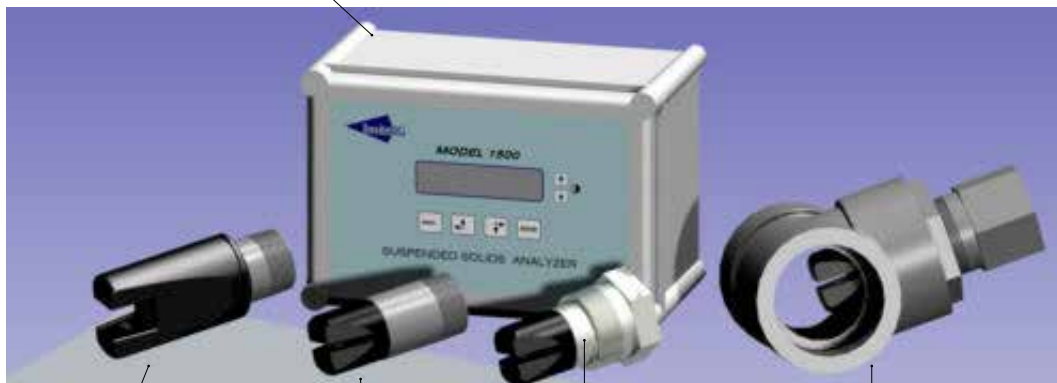
Simple Calibration – Low Maintenance – Designed for Wastewater

The Insite Instrumentation Group Model 1500 suspended solids analyzer is a unique system that combines advanced electronics with a combination of solid-state, optical sensors. No other suspended solids system can compare with the features and benefits of this revolutionary design. The sensors utilize optical principals based on the near infrared (880mm) range.

The Model 1500 analyzer was designed specifically for measuring the solids concentrations in the activated sludge process. With four sensor options it is now possible to reliably measure solids concentration from MLSS, RAS, WAS, clarifier effluent, and plant effluent. All sensors can use either automatic air or water cleaning to virtually eliminate routine maintenance necessitated by sensor fouling. The sensor is calibrated in-place to the specific application and takes on a few minutes to complete.

Continuous, online monitoring of solids concentrations allows for real-time control of such parameters as solids loading, sludge age, and return and waste concentrations. Active control translates into a stable environment that allows the desired microbiology to thrive, improving the efficiency of the plant and reducing operating costs.

**Model 1500 Analyzer**



**Model 15L**

**Model 15**

**Model 15PI**

**Model 15T**

## Suspended Solids Sensors

The sensors operate on the principle of single gap light absorption as a means of detecting the presence of suspended solids. The sensors utilize an infrared emitter to minimize colour effects and compensates for the emitter variations due to temperature by measuring source brightness. The sensors incorporate self-cleaning optics via air or water jet. Response time is 90% of full scale in less than 60 seconds. Sensor drift is less than 1% per year. Operating temperature range is 0 to 65 degrees C. The maximum cable length is 2000 feet. Wetted materials are epoxy, polyurethane, PVC, or 316 SS. Maximum pressure is 100 psi.



### Model 15 Submersible Sensor

MLSS – RAS – WAS

The model 15 sensor was designed to measure the solids concentrations in biological reactors, open RAS or WAS channels, and clarifier influent channels.



### Model 15L Submersible Sensor

CLARIFIER & PLANT EFFLUENT

The model 15L sensor was designed to measure the solids concentrations in biological reactors, open RAS or WAS channels, and clarifier influent channels.



### Model 15PI Sensor

RAS – WAS

The model 15PI was designed to be inserted into an activated sludge return or waste line. The sensor is epoxy, polyurethane, and 316 SS.



### Model 15T Sensor

MLSS – RAS – WAS

The model 15T sensor was designed for sample bypass lines of mixed liquor, return, or waste activated sludge.

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