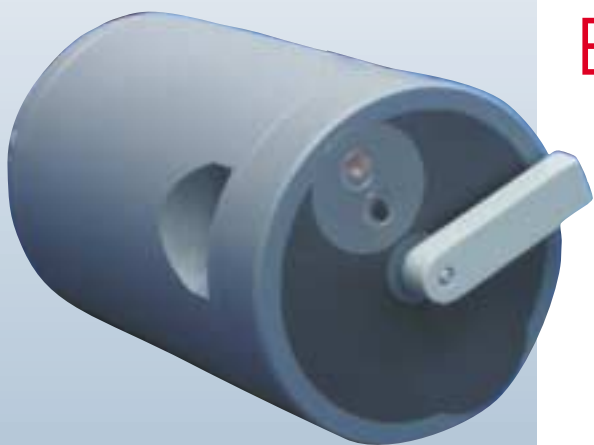


# BinMinder 9300-ETS™

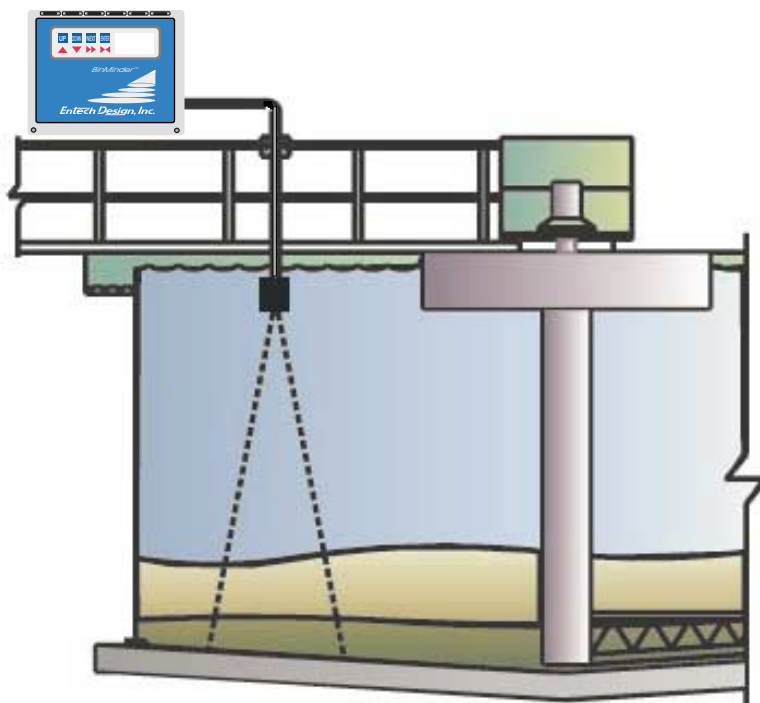
## Sludge Level *and* Effluent Turbidity Analyzer



Now . . . two  
important control  
parameters in one  
low cost sensor!

- Optimize clarifier control
- Respond quickly to clarifier upset
- Safely automate sludge pumping
- Prevent environmental discharge

**BinMinder 9300-ETS™** combines proven ultrasonic sludge level and reliable scattered light turbidity technologies in a dual purpose sensor. The result is unparalleled process control in wastewater treatment clarifiers and thickeners at a remarkably low cost!



The **9300-ETS™** sensor is utilized with the standard BinMinder 9300™ Interface Level Analyzer (See EDI Pub. No. BMB0998). It contains two independent sensors - an ultrasonic sludge level sensor and an infrared 90° scattered light turbidity sensor.

The analyzer is configured with one to four dual-capability sensors for multiple clarifier process control. Local monitoring of sludge levels is via the integral LCD display - and, independent 4-20mA proportional outputs provide monitoring and control signals for sludge level and turbidity.

**BinMinder 9300 with the 9300-ETS™ sensor optimizes clarifier control in a truly cost effective package.**

- Effective sludge level measurement for optimized clarifier control - with or without automated sludge pumping.
- Effluent turbidity alerts operators to deteriorating water quality and helps prevent environmental discharge and costly regulatory penalties.

# BinMinder 9300-ETS™

## Specifications:

### Sludge Level

- Measurement Principle - Underwater acoustic echo-time measurement type. Single 6° full beam.
- Range - 1-100 ft.
- Accuracy - 0.1 ft.
- Display - Multi-functional digital/graphical backlit LCD with membrane switch control panel.
- Signal Outputs - Four 4-20mA current loop analog, Four 10 amp contact relays, RS232 & 485 serial interface.
- Power - Analyzer: 110/220 VAC, 10%; Cleaning system: 12 VDC supplied by analyzer.

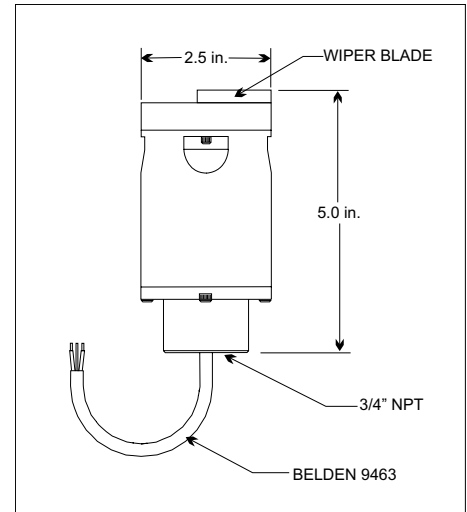
### Turbidity

- Measurement Principle - 90° Scattered light, pulsed LED, ambient compensated
- Range - 0-50, 0-200 NTU
- Accuracy - 1% of readings @ 50NTU
- Repeatability - 1% @ 50NTU
- Analog Output - 4-20 mA, 600 Ohm maximum load (one per sensor)
- Sensor Power - 12 VDC supplied by analyzer

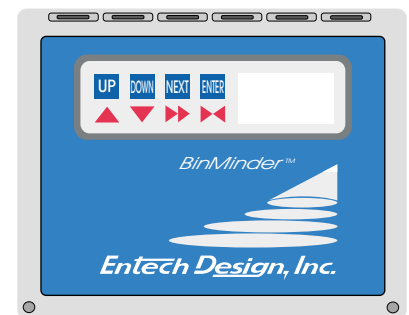
### Mechanical

- Analyzer - NEMA 4x, molded fiberglass polyester enclosure  
Wt: 8 lbs; Dimension: 10" x 8" x 6"
- Analyzer operates 1-4 dual-capability sensors.
- Sensor - PVC with epoxy encapsulating material, stainless steel and non-corrosive fittings and wiper blade.
- Sensor Cleaning - Integral Wiper System
- Temperature Range -  
Analyzer: -40°F to +140°F  
Sensor: -40°F to +120°F
- Connections: 2 conductor, shielded for ultrasonic sensor and 2 conductor for turbidity sensor

9300 ETS Sensor



BinMinder 9300 Analyzer



See EDI Pub. No. BMB0998

## Also Available - EPA 2000™ Media Expansion Monitor

- Measures media level and loss between backwash cycles
- Measures media expansion while backwashing filter
- Monitors media re-compaction after backwash
- Improve filter cleaning and extend filter run time
- Cost effective single and multi-sensor systems
- Entech Design, Inc. Brochure number EPAB0403 for complete details

## Superior Performance at Industry Leading Low Cost

Represented by:

### Corporate Offices

315 South Locust  
Denton, Texas 76201  
Ph 940-898-1173  
Fax 940-382-3242  
Email: [entech@entechdesign.com](mailto:entech@entechdesign.com)  
Website: <http://www.blanketlevel.com>

BinMinder 9300-ETS is a product and Trademark of Entech Design, Inc. EDI Pub. Number ETS0903, Copyright © 2003 by Entech Design, Inc. All rights reserved.

**Entech Design, Inc.**