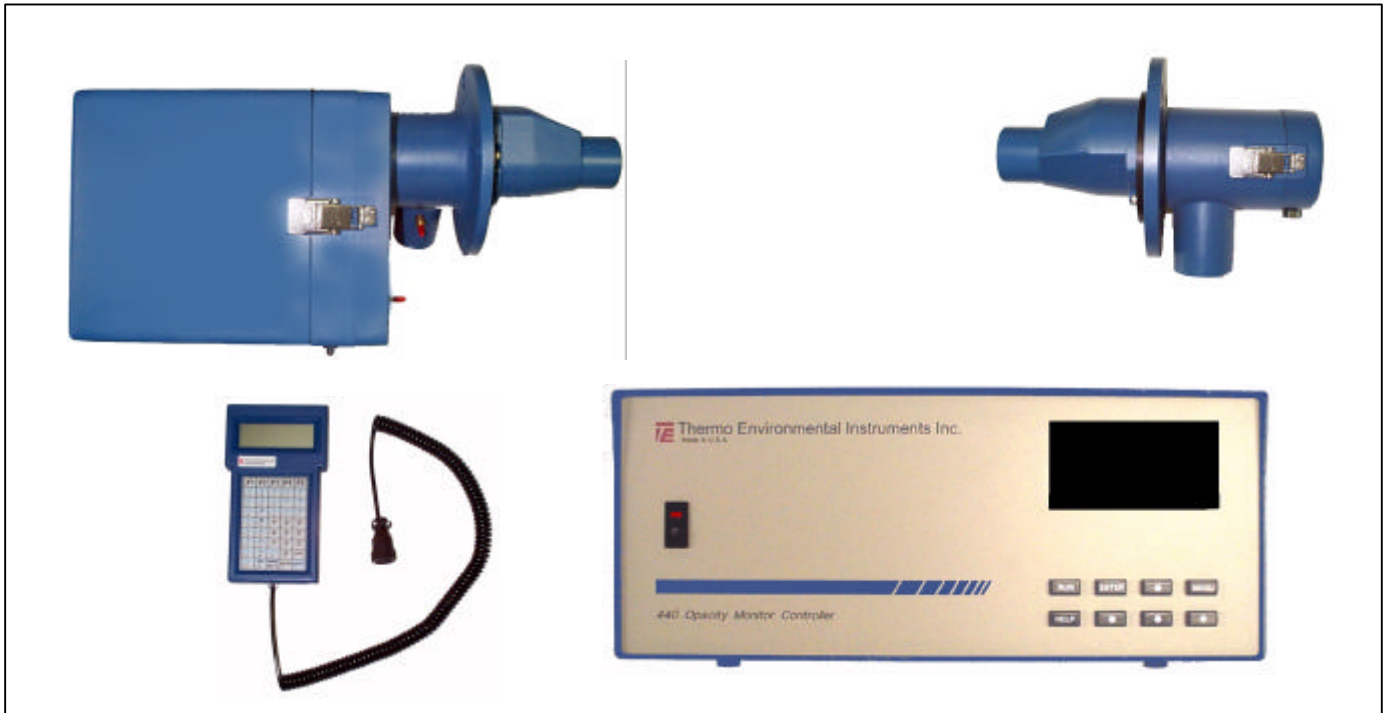


MODEL 440

Compliance Opacity Monitoring System



NEW TECHNOLOGY PROVIDING:

- Microprocessor-Based Head and Controller
- Extensive Diagnostic Capability
- Built-In Data Storage
- Controller/Combiner for up to Four Opacity Heads

Description

The Model 440 is a single path, double-pass instrument that continuously monitors stack opacity for compliance. A system incorporating a Model 440 meets current U.S. EPA requirements for stationary source monitoring of stack effluents.

Unique to the Model 440 is a quick-disconnect hinge mechanism that enables the field service technician to remove the optical head from the stack for remote servicing without altering the instruments alignment. This is particularly valuable in winter. To replace the instrument on the stack, simply set the optical head on the hinge pins, close the latch, reconnect the data and power cables, and switch the instrument on. Since no re-alignment procedure is required, maintenance is substantially reduced.

The microprocessor-based electronics contained in the optical head eliminates the need for analog potentiometers. All settings are made through digital parameters via the remote controller or local hand-held terminal. In addition, extensive diagnostics are available through the controller. Opacity and diagnostic data are stored in the instrument's built-in data storage, and can be downloaded to a PC via RS-232.

In the event of a stack power failure or purge blower feature, the Model 440 is protected from the corrosive stack effluent by automatic air shutter valves. These air shutter valves protect the analyzer and retro reflector until power is restored or the defective blower is replaced. Since the shutter valve system has few mechanical parts (no flow sensors or solenoids), it is highly resistant to particulate buildup and jamming.

System Specifications

Size and Weight

Optical Head	22½"L x 15¼"W x 30½" H 95 lbs.
Retro Reflector	22½"L x 15¼"W x 30½" H 84 lbs.
Blower Assembly	30½"H x 22½"D x 15¼"W (Swing Radius = 37")

Electrical Requirements

Optical Head And blower	120/230V ± 10%, 20/10 amps, 50/60 Hz, single-phase
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Opacity Range	0 to 100%
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Mass Density	0-999 mg/m ³
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Calibration Error	≤1% opacity
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Calibration Drift (24 hrs.)	≤1% opacity
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Zero Drift (24 hrs.)	≤1% opacity
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Auto Span and Zero	1 to 24 hours
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Spectral Response	400-700 nm range
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Angle of Projection	4 degrees maximum
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Angle of View	4 degrees maximum
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Outputs	(2) Isolated 4-20mA (2) 0-10 Volt RS-232
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Analyzer Response Time	1 second
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Typical Lamp Life	30,000 + hours
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Ambient Temp Range	-40 to +125°F
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Operational Distance	2 to 50 feet (flange to flange)
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Alarms	Window Dirty High Opacity Purge Fail Span	Communication Lamp
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For Price and Delivery Information, Contact:

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