

**Accurate. Reliable. Cost Effective.**

Emissions Monitoring for Compliance & Process Improvement



## Model 6010 Dual Pass Non-compliance Opacity Monitor

### Technology

The Model 6010, Dual Pass Non-compliance Opacity monitor, is an optical instrument designed to measure visible opacity (0 – 100%) of exhaust gas in a duct, stack or flue.

It utilizes double pass transmission measurement technique in which a light beam emitted from the transceiver passes across the stack to a reflector. The returned light intensity is measured by the transceiver. A reduction in intensity is measured and presented as opacity (0 – 100%).

Available with or without a Controller Unit, the Model 6010 can be used as a stand-alone configuration using a laptop/pc and the Utility Software supplied. The double pass measurement allows for manual calibration using the optional calibration head and zero/span adjustments.

With no moving parts, reliability is excellent and maintenance reduced to occasional cleaning of the TX and RX lenses. A latched head design provides easy access to lenses. An air purged body (blower recommended) provides the ability to further lengthen service intervals.

Ideal for applications including duct and tunnel monitoring as well as open space perimeter monitoring.



### Features and Benefits

- In situ measurement directly in exhaust gas flow
- Modulated green LED source for long lifetime and immunity to ambient light
- Compact, small packaging with built in air purge capability
- Modbus communication
- Low cost, low maintenance with no moving parts
- Simple installation and operation
- Rugged vibration resistant design
- Direct replacement for Fireye

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## Product Specifications

<b>Path Length (flange to flange)</b>	1.6 ft – 65 ft (0.5m to 20m)
<b>Measurement Range</b>	0-100% opacity
<b>Accuracy</b>	± 2% full scale
<b>Resolution</b>	0.1
<b>Drift with Temperature</b>	± 2% over any 68 °F within operating range
<b>Light Source</b>	Green LED
<b>Voltage</b>	+24VDC (90 – 260 VAC available)
<b>Current Consumption</b>	400mA nominal
<b>Purge Air Supply</b>	Instrument Air or Blower (must exceed max stack pressure)
<b>Measurement Gas Temp</b>	1,112 °F (600 °C)
<b>Ambient Temp</b>	-4 to 122 °F (-20 °C to 50 °C)
<b>Outputs</b>	Analog 4-20mA
<b>Relay Contacts</b>	3A at 30VDC (level alarms)
<b>Communication</b>	Serial (ModBus, USB, Ethernet)

## Ordering Information

### Model 6010 Single Pass Opacity Monitor

Choose from the following configurations/options to customize your own Model 6010

#### Path Length

S = Short (1.6 ft – 16 )  
L = Long (1.6 ft – 39 ft)

#### Controller Mount Style

N= No Controller  
W= Wall Mount  
P= Panel Mount

#### Voltage

A= 24VDC  
B= 90 – 160 VAC 50/60 Hz

#### Transmitter/Receiver

A= Aluminum Air Purge Head  
S= Stainless Steel Air Purge Head

#### Flange

A= ANSI 150, 1.5" Flange

#### Cables

T= TX/RX Interconnect Cable (150' Max)  
R= RX/Controller Interconnect Cable (600' Max)

Your Order Code: 6010 \_\_\_\_\_

*\*Flange Adapters available upon request*

## Service Offering

To ensure trouble free performance and reliability of all Cemtek Instrument products, we offer a comprehensive portfolio of service offerings at fixed cost pricing including; installation, training, support, extended warranty and preventative maintenance.

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