



## Model 6000 Single Pass Opacity Monitor

The Model 6000, non-compliance Opacity Monitor, is an optical instrument designed to measure visible opacity (0 – 100%) in exhaust gas for duct, stack or flue combustion applications.

Utilizing single pass transmission measurement technique in which a light beam emitted from a transmitter passes across the stack to a receiver that measures the intensity of the received light from its green LED source. Attenuation of the light in the presence of high particulate loading or smoke is measured and presented as opacity (0 – 100%).

Available with or without the Controller, the Model 6000 can be used as a stand-alone configuration using a laptop/pc and the Utility Software supplied.

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.

### OPACITY MONITOR

#### KEY FEATURES:

- Long life green LED
- 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



#### CEMTEK INSTRUMENTS

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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 6000 SINGLE PASS NON COMPLIANCE OPACITY MONITOR

Choose from the following configurations/options to customize your own Model 6000

#### Path Length

S = Short (1.6 ft – 16 )  
L = Long (10 ft – 65 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: 6000 \_ \_ \_ \_ \_

\*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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