

# SDM100 OPACITY MONITOR

The SDM100 is a High Performance Opacity Monitor for different application such as black smoke from engines, boilers and Incinurators as well as oil mist monitor for engine rooms and hydraulic stations.

Meets regulatory requirements are easy to operate, minimal operating costs and long life ensure the user a satisfied service for many years.

- IR emitter / transiver with wide dynamic range
- Meets regulatory requirements
- Low cost solution
- Easy menu driven user interface
- Stainless steel protected optical fibers
- SS316 process connection

- Oil mist monitoring
- Black smoke Monitor
- CEM Continuous Emission Monitoring
- Diesel Engine and Boilers
- Incinurator
- Prevent fines and delays



[instrumatic.com](http://instrumatic.com)



[info@instrumatic.com](mailto:info@instrumatic.com)

[www.instrumatic.com](http://www.instrumatic.com)

### Product specifications

<b>Model</b>	SDM100
<b>Application</b>	Real time monitoring of opacity, black smoke, oil mist etc.
<b>Sample collecting method</b>	Cross duct monitoring
<b>Components</b>	Opacity/Transmittance
<b>Analyzing method</b>	IR - infrared
<b>Measuring range</b>	0 – 100%
<b>Response time</b>	0,1 to 10 sec. user selectable
<b>Analog output current</b>	4 – 20 mA DC
<b>Analog output voltage</b>	0 – 10 V DC
<b>Alarm output 1</b>	SPDT max. 250V AC
<b>Alarm output 2</b>	SPDT max. 250 VAC
<b>Linearity</b>	< 1%

#### MONITOR UNIT

<b>Supply</b>	210 to 240 V AC 115 to 125 V AC
<b>Consumption</b>	20 VA
<b>Dimension in mm</b>	300 x 200 x 150 (H x W x D)
<b>Weight</b>	5 kg App.
<b>Enclosure</b>	IP66 steel plate
<b>Enclosure approvals</b>	LRS, DNV and GL

#### SENSOR HEADS

<b>Measuring distance</b>	0,5 to 3 meters
<b>Process connections</b>	1" Male PT (2 x stud pipe with 200 mm length welded axial)
<b>Process temperature</b>	max. 240°C (with purge air up to 500°C)

#### OPTICAL FIBERS

<b>Optical fiber length</b>	4,5 meters standard (consult factory for longer lengths)
<b>Maximum Temperature</b>	200°C
<b>Fiber diameter</b>	6,5 mm
<b>Fiber armor</b>	SS sheathing

