

Used for non-compliance applications, the CODEL EnergyTech 101/102 is a simple, reliable, cost effective way to measure opacity or dust in a stack or duct.

Description

The **EnergyTech 101/102** Opacity Monitor is a single-pass transmissometer consisting of a visible light transmitter and receiver arrangement with digital data processing in a local display unit. The monitors can display data in either opacity, extinction or dust density in mg/m^3 or normalized dust density in mg/Nm^3 .

Using analog inputs from a process, the **EnergyTech 102** offers normalization of the of the opacity data from temperature, oxygen, pressure and water vapor.

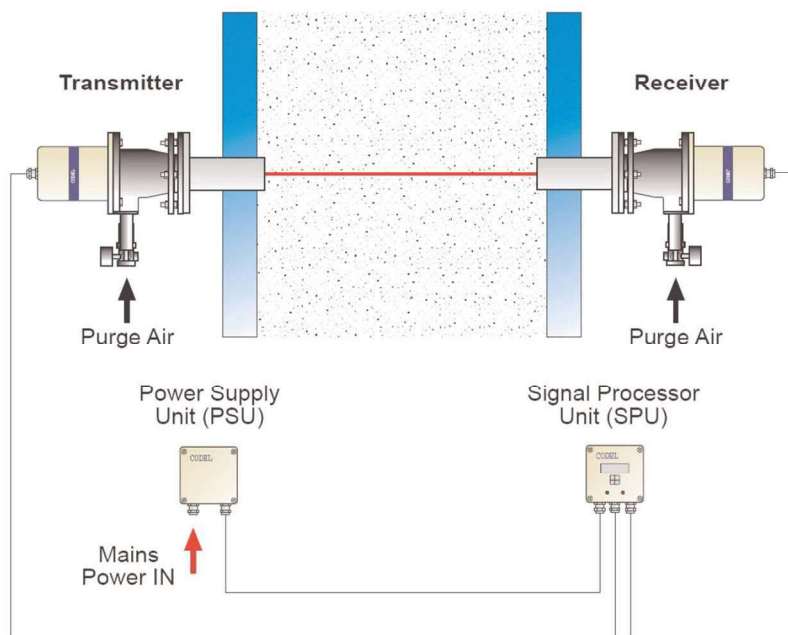
Features and Benefits:

- > Simple installation for low initial cost
- > Proven technology offers low maintenance and high reliability
- > High-efficiency air purges minimize lens contamination
- > Data in percentage opacity, mg/m^3 , mg/Nm^3 dust for optimum flexibility



APPLICATIONS

- > Coal and Fuel-oil Fired Plants
- > Wood Fired Plants
- > Converter Plants
- > Pulp & Paper Plants
- > Processing Plants
- > Asphalt Plants
- > Cement Plants
- > Any plant requiring *opacity or dust monitoring*



MONITORING SOLUTIONS

Complete source for all your Continuous Emissions Monitoring (CEMS) needs:

- > Both Dilution and Extraction CEMS systems
- > Data Acquisition Systems (DAS)
- > Flow Monitoring
- > Opacity Monitoring
- > Oxygen Monitoring Systems
- > Particulate (PM) Monitoring
- > Process Monitoring Systems

Measurements

Operating Principle	Single pass transmissometer
Light Source	Modulated high-intensity LED at 637 nm wavelength
Span	Fully selectable in % opacity, extinction, mg/m ³ & mg/Nm ³
Averaging	4 rolling averages selectable from 10 secs to 30 days
Accuracy	±0.2% opacity
Drift	<1% opacity per month
Resolution	0.1% opacity
Optical Path Length	1.6 feet – 49 feet

Input & Outputs

Analog Outputs	2 x 4-20 mA current outputs, isolated, 500 Ω load max., fully configurable from keypad
Digital Outputs	2 x volt-free SPCO contacts, 50V, 1A max., configurable as alarm contacts 1 x volt-free SPCO contact, 50V, 1A max. for data valid
Digital Inputs (102 only)	4 x 4-20 mA inputs for normalization data, temperature, oxygen, pressure & water vapor

General

Display	32-character alpha-numeric back-lit LCD
Keypad	4-key soft-touch entry
Construction	Epoxy-coated aluminum to IP67
Ambient Temperature	-4°F to 158°F
Power	76 to 265 Volts AC @ 50/60Hz, 20VA
Air Purge Requirements	Compressed air, 1 liter/sec @ 1bar
Options	Heated flanges to prevent condensation on lenses

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