

Double Pass Particulate Monitor

(With DDP) Model : DSL - 340 / 330



Protects **Personnel, Plant
& Assets**

OFFERS AN IDEAL SOLUTION TO YOUR EMISSIONS MONITORING OR PROCESS CONTROL REQUIREMENT



DOUBLE PASS PARTICULATE MONITOR, A OPTICAL BASED INSTRUMENTS DESIGNED FOR MONITORING DUST AND PARTICULATE CONCENTRATIONS (mg/m^3) IN THE EXHAUST GAS OF INDUSTRIAL COMBUSTION OR AIR FILTRATION PROCESSES

TECHNOLOGY

The Double Pass Models (DSL-330) use the transmission measurement technique (a folded beam transceiver arrangement) in which a light beam emitted from the transceiver passes across the stack to a reflector, which then returns the light to the transceiver, where the intensity of the received light is measured. Increased particulate or smoke density in the stack gas attenuates the transmitted light and causes the intensity of the received light to fall. When calibrated against standard reference measurements, this reduction in intensity can be used to calculate the particulate concentration in mg/m^3 . The double pass measurement technique allows for manual calibration checking using the optional calibration head and zero/span inserts. Used in conjunction with the supplied utility software, zero and span, drift values can be calculated, recorded and corrected for.

The DSL-340 uses the innovative Dynamic Detection Principle (DDP), unlike the standard transmission technique, DDP has an immunity to gradual reductions in the absolute intensity of the light signal, and therefore has the advantage, that it is significantly less susceptible to drift with time, temperature, or dirtying optics, than traditional opacity monitors using the standard transmission technique.

DSL SERIES ORDERING DETAILS

X X X X

A : Aluminium air-purge heads
S : Stainless steel air-purge heads

D : 24 V DC powered
A : 90-260 V AC powered

N : No Controller
W : Wall mounted Controller
R : Rack mounted Controller

L : Short path length version (0.5 - 5 m flange to flange separation)
S : Long path length version (3 - 20 m for single pass, 2.5 -12 m for double pass)

DSL SERIES MODELS

240/230 : Particulate monitor with DDP (single pass)
340/330 : Particulate monitor with DDP (double pass)
460 : Particulate monitor with Auto-calibration

APPLICATIONS

- Boilers, diesel engines
- Wood burners, furnaces
- Electrostatic precipitators
- Filter bag houses, Incinerators

HNL Systems Pvt. Ltd.

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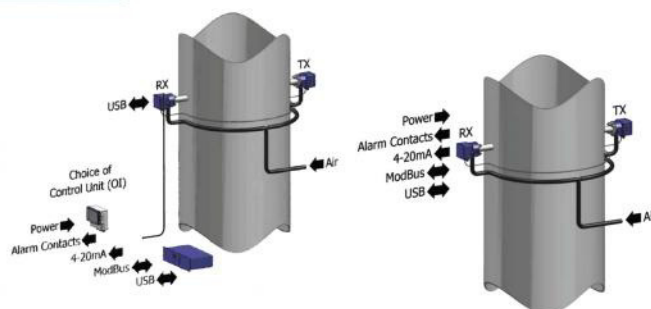
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CONFIGURATION OPTIONS

Configured with controller : Wall or rack mounting



SPECIFICATIONS

Type	Field / wall mounted
Detectable gases / parameters	Opacity
Electronics / processor	Micro-controller
Power supply	24 V DC for DSL sensor (230 V AC / 50 Hz for Receiver)
Display	Graphic LCD
Alarm	Integral visual alarm or remote alarm
Output	Relay, 4-20 mA analog, RS 232/485, Modbus
Technology	Light transmission
Resolution	1% V/V, mg/m ³
Accuracy	± 2%
Response time	Instantaneous
Operating temperature	-20 to 55 °C
Input	In situ
Housing	SS 316 powder coated & ABS plastic for receiver
Accessories	Mounting flange, Laser alignment tool, Air purge blower kit, Reference filters for routine
Path length (flange to flange)	0.5 - 20 m (flange to flange separation)
Measuring range	0-1000 mg/m ³ (user selectable)
Damping	1- 60 s (selectable)
Drift with temperature	± 2 % (over any 20 °C in the operating range)
Cable type	6 cores for TX/RX Interconnection (screened multi-core) 4 cores for Controller/RX Interconn. (screened multi-core)
Terminal connections wire size	28-14 AWG
Serial comm. interface options	1. Modbus RTU (on terminals in Controller or Transmitter) 2. Internal USB (Controller), External USB (Receiver) 3. ProfiBus, DeciceNet, Ethernet etc. on request
Ingress protection-TX/RX heads	IP 65 (for external use)
Regulatory compliance	89/336/EEC (electromagnetic radiation), 73/23/EEC (low voltage)
Dimensions	250 X 200 X 100 mm

Note : Specifications and Features will vary with application. There may be changes overtime due to continuous development process.
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