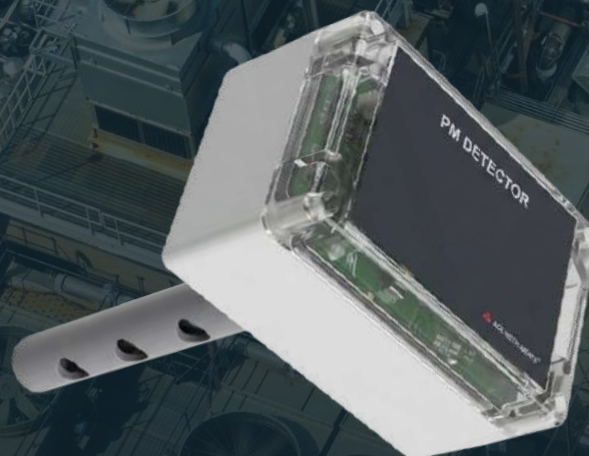


# Particulate Matter Duct Mounting Transmitter



Model: AI-PM-DT



PM2.5



PM10

## Features

- Laser scattering based particulate matter sensor to measure PM2.5 & PM10
- Optional RS-485 Modbus Communication
- Dual analog outputs (4-20 mA/0-10VDC) for PM2.5 and PM10
- Optional Display
- IP54 duct mounting ABS plastic enclosure with adjustable clamp

The AI-PM-DT is suited for the monitoring of Particulate Matter (PM2.5 & PM10) in HVAC ducts. The instrument boasts a rugged IP54 enclosure, with dual analog 4-20mA/0-10 VDC field selectable outputs and optional RS-485 Modbus communication, sending information to BMS/EMS/SCADA for thorough climate control and monitoring.

The Duct Particulate Matter Sensor (AI-PM-DT) leverages a laser-scattering principle based sensor suited for reliable and consistent monitoring of PM levels for all applications. The transmitter is suited for duct mounting for the monitoring of indoor air quality in high occupancy commercial buildings.

Comprehensive indoor air quality monitoring range  
CO<sub>2</sub> | CO | Temp | Humi | VOC | PM | O<sub>2</sub>



Improve occupant comfort and building environment through IAQ monitoring in..



Retail spaces



Workspaces



Educational institutions

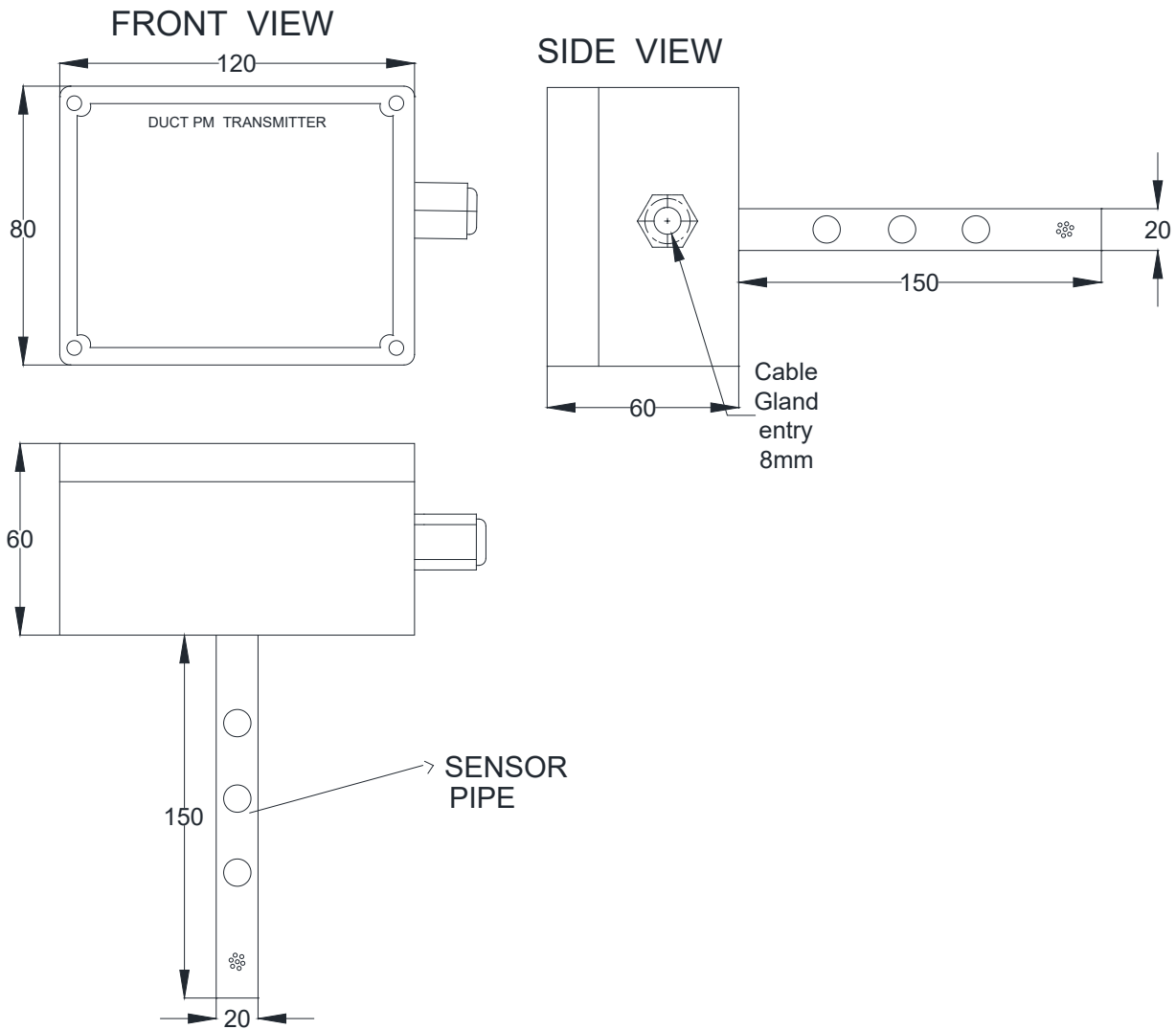


Auditoriums & museums

## Specifications

Measuring Principle	Laser scattering based sensor for reliable particulate matter detection
Switch On Behavior	Time until reliably detecting Stable PM Reading < 60 seconds
Mounting	Duct mounting type ABS enclosure with adjustable clamp
Analog Output	4-20 mA/0-10 VDC (field selectable)
PM 2.5, PM 10	Measuring Range: 0-1000 $\mu\text{g}/\text{m}^3$ Accuracy: $\pm 15 \mu\text{g}/\text{m}^3$ (when concentration is $<100 \mu\text{g}/\text{m}^3$ ) $\pm 15\%$ (when concentration is $>100 \mu\text{g}/\text{m}^3$ )
Communication (Optional)	RS485 Modbus
Sensor Working Life	> 5 years @ 10-35 Deg. C & 40-80 % R.H. for general applications
Power Supply	24 VDC/ 350 mA
Enclosure	Duct Mounting Type IP54 Rating compliant ABS Plastic Body with duct clamp
Product Conformance	CE

## CAD Diagram :



## Wiring Diagram:

### For OUTPUT:

1	2	3	4
+	-	+	+
24V DC		PM10 O/P	PM2.5 O/P

Jumper  
Selection for mA(4-20mA)



Jumper  
Selection for Voltage (0-10VDC)



### For RS485 Communication:

1	2	3	4	5	6	7
+	-	+	+	A	B	G
24V DC		PM10 O/P	PM2.5 O/P	RS 485 Communication		

Customize your IAQ solution with us today



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