

PMR25

PARTICULATE MATTER, AIR QUALITY (CO₂, TVOC), TEMPERATURE AND HUMIDITY SENSORS



The PMR25 Series Smart Particulate Matter Multi-Sensors have been designed for monitoring Particulate Matter, VOC, Temperature and Humidity in room spaces. Optional CO₂ and Occupancy detection are available.

The sensors have modern design and are mounted on the wall surface directly or to standard wall mounting boxes.

The sensors can have an optional colour display with high hardness glass front. Touchscreen option is available for network user interface functions and interactive sensor operations such as trending. Bluetooth wireless interface provides connection to Smart Phone App interface (iOS) or to PC Device Configuration Tool.

Technical Details Summary

Power: 24Vac/dc $\pm 10\%$

Particulate Matter: Mass Concentration Size Range: PM1.0: 0.3 to 1.0 μ m
PM2.5: 0.3 to 2.5 μ m
PM4: 0.3 to 4 μ m
PM10: 0.4 to 10.0 μ m
Mass Concentration Precision: PM1.0/PM2.5: 0 to 100 μ g/m³; ± 5 μ g/m³ + 5% m.v.
PM1.0/PM2.5: 100 to 1000 μ g/m³; $\pm 10\%$ m.v.
PM4/PM10: 0 to 100 μ g/m³; ± 25 μ g/m³
PM4/PM4: 100 to 1000 μ g/m³; $\pm 25\%$ m.v.
Calibrated to TSI DustTrak™
DRX 8533 Ambient Mode Calibration:

PM2.5 Mass Concentration Calibration:

Temperature: Range: 0..50° (32..122°F)
Accuracy: $\pm 0.5^\circ\text{C}$ (typical accuracy $\pm 0.3^\circ\text{C}$, 18-24°C)

VOC/ TVOC: Volatile Organic Compound/Total Volatile Organic Compound
Range: Air Quality Index : 0..500
TVOC Ethanol: 17..4491 μ g/m³ // 9..2383 ppb
TVOC Molhave (WELL Building Standard®): 23..6621 μ g/m³ / 5..1326 ppb
TVOC Isobutylene (RESET® Standard): 21..5482 μ g/m³ / 9..2389 ppb
Device to Device Variation: ± 10 index points

Humidity: Range: 0..100%rH
Accuracy: $\pm 2\%$ rH (within 20 to 80%rH)

CO₂ Range: 0..5,000ppm

(Option): Accuracy: ± 30 ppm $\pm 3.0\%$ m.v.

PIR (Option): Occupancy Detection, Range: 5m

Comms: Wired: Modbus RS485 or BACnet MS/TP, with 60V Fault Tolerance, 1/10 Unit Load

Bluetooth: Built-in BLE Low Energy - Configuration too/iOS

Display: Full Colour 2.4" LCD, 240x320px

Touch: Capacitive Touchscreen

Terminals: Rising Cage Screw Terminals, 0.2 to 1.5mm² / 30 to 16 AWG

Enclosure: ABS ULV0 Plastics - White or Black, IP30
Hardened Glass ≥ 6 H for Display/Touch

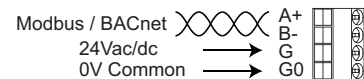
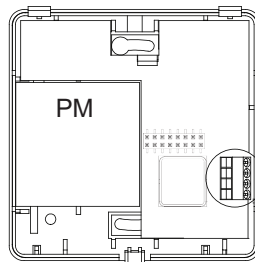
Dims: W86 x H86 x D24mm

Origin: United Kingdom

Part Number		SKU# Number	
Product Name	Room Particulate Matter Sensor, with Relative Humidity, Temperature and VOC, Built-In BLE, 24Vac/dc Supply	Code	Product Options
PMR25		1400	
Communications Options			
MOD	Modbus RS485, Up to 60V Protection	1	
BAC	BACnet MS/TP, Up to 60V Protection	2	
Interface Options			
	No Interface		00
LCD	Colour Display		01
TS	Colour Capacitive Touchscreen		02
Measurement Options			
	No Extra Measurements		00
OE	Passive Infrared Sensor (PIR)		03
CO ₂	CO ₂ (Carbon Dioxide) Measurement		06
OE-CO ₂	CO ₂ Measurement and Passive Infrared Sensor (PIR)		03
Colour Options			
B	Black		00 01
W	White		00 02

Order Example: PMR25-MOD-TS-W, SKU# 1400 10200 0002

PMR25 WIRING



DISPLAY EXAMPLES (LCD and TS MODELS)

-LCD DISPLAY BLACK COLOUR

-LCD DISPLAY BLUE COLOUR

-LCD DISPLAY GREEN COLOUR

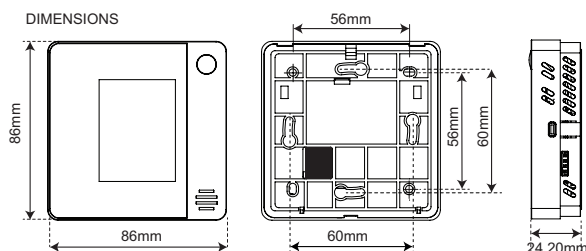
-LCD DISPLAY WHITE COLOUR

-LCD DISPLAY GREY COLOUR

Legend:

- Fan Speed Indication (Network or Local Button)
- Occupancy Indication (PIR or Network)
- Alarm Indication (Measurement or Network Signal)
- Up to 4 Display Locations to Show Measurements
- Descriptive Text Indication (Low / Normal / High)

DIMENSIONS



DATA SHEET