AirMetER-DX MULTIPLE FRACTION PARTICLE MONITOR

LOW-MAINTENANCE MULTIPLE-FRACTION DUST MONITOR FOR OUTDOOR AIR QUALITY MONITORING APPLICATIONS

The AirMetER-DX is an economical and low-maintenance laser-based particle monitor designed for measuring particulate matter. Offering multiple fraction monitoring and recording capabilities, the AirMetER-DX is available in two models:

> AirMetER-DXII - $PM_{2.5}$ and PM_{10}
> AirMetER-DXIV - PM_1, $PM_{2.5}$, $PM_{4.25}$, PM_{10} and TSP.

Designed to withstand various weather conditions, the AirMetER-DX is housed in a weather resistant enclosure ideal for round the clock continuous outdoor monitoring. The AirMetER-DX has datalogging capacity at a minimum of 365 days at one-minute intervals with built-in log and forward capability to locally store the data in the event of a network disruption.

Integrating seamlessly with Air-Met Scientific's web-based portal for remote data access, this secure data portal enables users to access monitoring logs, set customisable alerts, manage monitoring reports and more. The web-service application is accessible on both desktop PC and mobile smart devices.

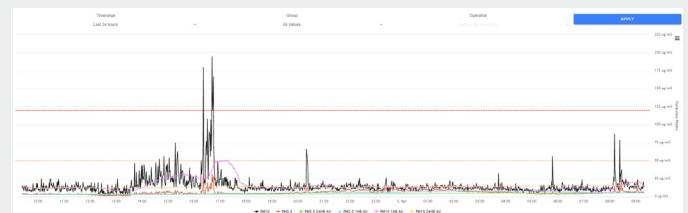### AirMetER-DX | Proudly Australian Made

FEATURES & OPTIONS

> Heated inlet
> Low maintenance
> Locally serviced and supported by Air-Met Scientific
> Supports integration of external fixed sensors e.g. Fixed Gas Transmitters, Soil Moisture Probes.
> Optional PM_1, $PM_{4.25}$ & TSP
> Optional alarm indicator capability
> Optional weather monitoring
> Optional noise and vibration monitoring

DATA MONITORING

Cellular telemetry through Air-Met Scientific's secure data portal. Requires a minimum 12-month subscription to Air-Met's data portal.

> 1 minute datalogging interval with FTP transfer to Air-Met Scientific's secure web service.
> Customisable rolling averages upon request
> Data downloads, user management, threshold alert management (SMS and/or email) and auto-report generation all managed via Air-Met Scientific's data portal.

Air-Met Scientific

airmet.com.au

TECHNICAL SPECIFICATIONS

GENERAL

Power Requirement	12VDC
Rated Power	33W
Operating Temperature	0°C to 50°C
Operating Humidity	0 to 95% non-condensing
Operating Pressure	860 to 1100 hPa
Particulate Sensor Operating Life	2 years (when operated below 40°C)
Datalogging	3 years of logs onboard with unique file name creation every 24 hours
Alarm Indicator (optional)	Onboard dedicated alarm relays

ENCLOSURE

Material	Polycarbonate
Dimensions (mm)	400 (H) x 300 (W) x 150 (D)
Instrument Weight	7.0kg
Mounting Options	Pole-mount kit supplied (recommended installation method) Wall-mount − ~70 mm offset required for dust inlet clearance

COMMUNICATION

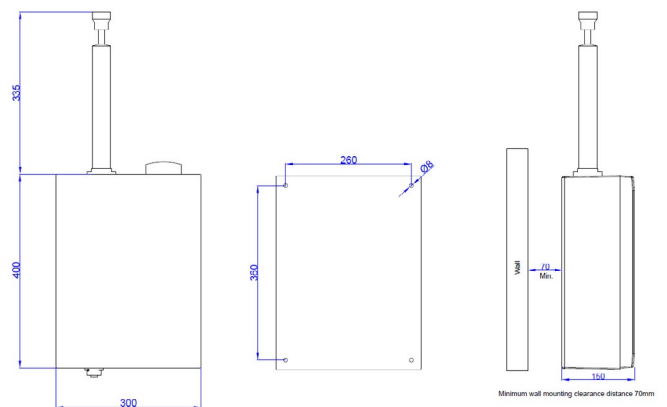|	
PLC or SCADA Integration	Serial RS485, Modbus TCP/IP (DX-IV only)
FTP Upload	Cellular (Ethernet or WiFi upon request)

PARTICULATE MEASUREMENTS

	AirMetER-DXII (PM$_{2.5}$ & PM$_{10}$)	AirMetER-DXIV (PM$_1$, PM$_{2.5}$, PM$_{4.25}$, PM$_{10}$ and TSP)		
Range	0−999.9µg/m³	0-30,000µg/m³		
Resolution	0.1µg/m³	1µg/m³		
Relative Error	Max of ±15% and ±10µg/m³	PM$_1$/PM$_{2.5}$/PM$_{4.25}$	± 10% of reading	
		PM$_{10}$	± 15% of reading	Up to 1000µg/m³
		TSP	± 20% of reading	

SPARE PARTS & ACCESSORIES

PART NO.	DESCRIPTION
TF-TRI-AL	1.2m Tripod
AMS/250S/120B/15M/9C	120 Ah Lithium Solar Battery Kit
AMS-LPF-60-12	Power Supply (100-240 VAC Input)
9933-05-CQ	Dust Filter for DX-II Module
SF-OPC6303-15-QN	Dust Filter for DX-IV Module

For all additional particulate & meteorological sensors, please contact Air-Met Scientific.

Air-Met Scientific   airmet.com.au