

FILTER MASTER PRO 5000

LOW VOLUME AIR SAMPLER



- ▶ Made in Australia
- ▶ PM10, PM2.5, TSP and more
- ▶ Easy to use
- ▶ Remote connectivity & telemetry
- ▶ Local and genuine support

HOW IT WORKS

The Filter Master Pro 5000 low volume gravimetric air sampler for TSP, PM10 and PM2.5 monitoring, is manufactured in Australia to the highest standards and built to withstand the harshest climates.

The 5LPM flow rate ensures heavier particles remain entrained and are collected onto the 37mm filter. Sample Validation is guaranteed with each unit recording temperature, pressure and flow rate.

The quick deploy design, graphical display and dedicated keypad with intuitive menu simplify on-site operation, and each FMP5000 system includes inlet jets which allow the user to effortlessly interchange between TSP, PM10 and PM2.5 fractions in the field.



PERFECT FOR:

- ▶ Governments & Authorities
- ▶ Consultants & Engineering
- ▶ Civil & Construction
- ▶ Mining & Quarries
- ▶ Logistics, Ports & Terminals



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KEY FEATURES AND HIGHLIGHTS:

- **Manufactured in Australia** with premium quality and service you can trust
- Advanced pump system with high **5LPM flow rate** and quiet operation
- Easy field calibration available via **Automatic Field Calibration Mode**
- Mains, battery or solar power options
- **In-built** data logging capability
- **Remote data access** via 4G modem
- Easy to set alarm capabilities through **SMS messaging to mobile** phone, external siren or visual beacon
- EPA Mode: Automatic 3 or 6 day runs, or continuous
- Meteorological sensor compatibility and logging



WEATHER & METEOROLOGICAL SENSORS

The Filter Master Pro has Plug 'n' Play integration with up to 3 Lufft Meteorological Sensors, which means no additional costly data loggers for your weather monitoring requirements. The FMP has the capability to record up to 47 distinct parameters, including:

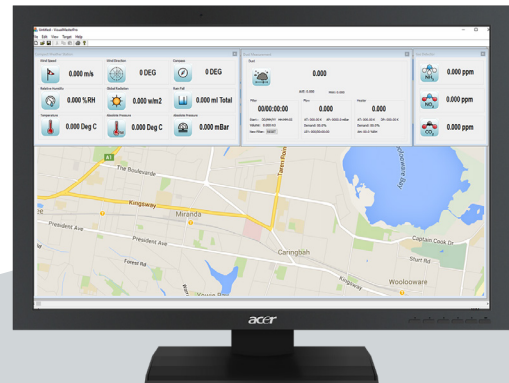
- Wind Speed and Direction
- Air Temperature
- Relative Humidity
- Barometric Pressure
- Precipitation Type, Intensity and Quantity
- Solar Radiation
- Lightning Strikes
- and more.

QAMS EPA MODE

... is a unique feature allowing the user to pre-select specific monitoring cycles by choosing a starting date and time, hours on, hours off, as well as the number of times you would like the cycle to repeat. So, if you are monitoring every 6th day, select 61 cycles, and your unit is programmed for one year!

QAMS MASTER PRO RANGE

- MMP 1000 Data Logger
- FMP 5000 Filter Sampler
- FMP 167 Filter Sampler
- DMP 7000 Real-time Particulate Counter



VISUAL MASTER PRO DATA SOFTWARE

VMP Data Logging Software (valued at \$1,799) comes **included** with your Filter Master Pro purchase. The remote interface software requires no coding and makes it simple for both non-technical and expert users to access data and adjust instrument setting at an advanced level.

- Live data display allows you to access first-hand information
- Real-time data display, real-time decision making
- Remote access for data downloading and configuration
- Synchronised data set for ease of download
- Unique EPA mode allows user to simply set up the system to meet EPA requirements
- Operating on Windows 7 through to Windows 10
- Compatible with QAMS Dust Master Pro, Met Master Pro & Filter Master Pro
- Format available in CSV, HTML and ASCII.



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PROUDLY MANUFACTURED IN AUSTRALIA BY THOMSON ENVIRONMENTAL SYSTEMS

We developed the QAMS range specifically for outdoor monitoring in Australia's harsh conditions. We built QAMS for ease-of-use, robustness and suitability for a diverse number of applications.

Since the first QAMS monitor launched in 2008, we have continually strived to improve the product and make it the highest quality instrument on the market. With years of field operation and a strong positive response from our users, we are proud that the QAMS range has become a leader in monitoring, construction, mining and industrial monitoring applications.



FILTER MASTER PRO 5000

PM Fraction Measurements	Measures all popular PM fractions including; PM1, PM2.5, PM4, PM10 and TSP. TSP, PM10 and PM2.5 inlets supplied with the unit as standard. (One used at a time.)	Standard Battery System	Provides approx. 210 hours of operation
Simultaneous PM Channels	Not applicable on this model. Use DMP7000 Series for simultaneous measurement of five PM fractions	Portable Battery System	Provides approx. 48 hours of operation
Flow Rate	5.0 litre per minute Venturi Controlled (default)	Solar Power System	Provides continuous operation based on average of >4.5 hours of sunlight per day, and will continue for up to 3 days with no sun. System includes Solar Panel & Stand, Battery & Battery box, Regulator
Flow Accuracy	Precision automatic flow control to within +/- 1%	Meteorological Inputs	Multiple channels including wind speed, wind direction, humidity, temperature, precipitation, barometric pressure, solar radiation, evaporation, sigma theta, lightning & more
Barometric Pressure	Built-in barometer for ambient static pressure measurements for precise flow control	Digital Inputs	3 optically isolated inputs, voltage-free
Temperature Probes	2 Channels: RTD (PT100)	Relay Contacts	3 relay contacts (NC/COM/NO) Alarm 1 set point Alarm 2 set point Instrument fault alert
Data Download	Data can be polled or automatically and continually pushed to your server	Communications	2 x RS232 digital ports, RS485/ RS422 and analogue
Display Type	128 x 64 bit low energy graphical LCD display	Inputs	2 x RS232, 2 x Analogue (0 to 5 volt or 4-20mA [jumper selectable]), 2 x Counter Channels, 2 x PT100 & 1 x SHT75X inputs included.
Keypad / User Interface	12 button function with keys	Outputs	3 x Analogue Outputs (0 to 2.5 volt standard, 0 - 5 volt optional, or 4-20mA [jumper selectable]), 1 x RS232 Output, Ethernet Module Optional, 3 x Solid State Relays for Audio and Visual Alarms
Gravimetric Filter Sampling	Integrated filter holder, 37mm filter cartridge	Alarm Capabilities	SMS messaging to mobile phone, external siren, visual beacon and email alerts
Internal Data Logging/Memory	8MB internal data logging with full flash memory back-up. Time and date stamped and capable of logging data from the various analogue and digital inputs	Enclosure Type	NEMA4 / IP66 rated
Data Logging Interval	Fully user adjustable from 5 to 999 seconds	Tripod or Post Mounting	May be easily mounted on a 50mm diameter post or on TES transportable heavy duty tripod
Extended Data Logging	TES are happy to cooperate with other data logger suppliers to allow integration of our system into existing networks.	Optional Inlet Heads	PM2.5 PM10 (supplied with unit) TSP (supplied with unit)
Power Requirements	12vdc @ 1.2amps	Weight and Dimensions	System: 7kg Heated Inlet: 1kg Width 300mm Depth 200mm Height 350mm
Power Demand	Mains Power, Battery Power or Solar Power (all waterproof)	Operating Conditions	-10 to 50 deg C temperature range 0 to 95% humidity range
Mains Power	Operates from 80 to 260 VAC and is fully weatherproof.	Flow Calibration Method	Mesa BIOS Defender Flow Calibrator

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