

WHY CONDUCT DPM (DIESEL PARTICULATE MATTER) MEASUREMENTS ?



HEALTH CONCERNS

The International Agency for Research on Cancer (IARC) have focused on promoting public awareness of the dangers of Diesel Particulate Matter (DPM) to human health from the microscopic carbon-based particles emitted from Diesel Exhaust Engine Emissions (DEEE).

DPM is classed as a group 1 cancer causing agent (The most dangerous category). Utilising a DPM analyser, industry is assisted to reduce diesel emissions. DPM management through various reduction technologies is an integral part of emissions-based management of diesel engines.

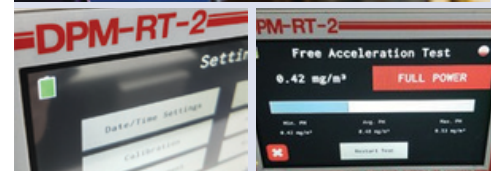
The DPM-RT-2 analyser is the industry standard across the globe for real-time measurement of DPM, taken from the engine exhaust.

FEATURES

- Simple Touch Screen Interface, Minimal Training Required
- Instant Measurement of fine DPM particles to take immediate action
- Accurate, Repeatable Results using Laser Light Scatter Technology
- Data Logging with Engine/ Section Details
- USB/WiFi Data Download with Browser Based Graphs and CSV options
- Light Weight (4kg) , Portable, Designed for Everyday Workshop Use
- Rugged Design for Use in Harsh Environments
- DPM Mass Measurement
- Calibration Traceable to National Institute for Occupational Health and Safety NIOSH 5040 Industry Standard
- Guided Stall and Free Acceleration Testing Methods from MDG 29 (NSW Department of Primary Industries – Mine Safety)

APPLICATIONS

- Health, Hygiene and Compliance for Underground Mining
- Test DPM Emission Reduction Technologies
- Emissions based Maintenance, test DPFs and Engine Performance
- DPM Management for other industries: Marine, Industrial Generators, Locomotives, Defence



DPM-RT-2
Real Time Diesel Particulate Analyser



* Emissions Measurement * Drug + Alcohol * Environmental Monitoring * Post Harvest Technology

INDUSTRY STANDARD

The DPM-RT-2 has been adopted worldwide as a simple and reliable tool by underground and surface mining workshops. This will assist in; Fleet Monitoring; Hygiene Management as a tool to ensure the safety of the workforce, maintain compliance with government testing authorities and other industry statutory required testing.

The DPM-RT-2 is the 'go to' tool across industry, making the testing procedure of DPM quick and easy. An integral piece of equipment for the measurement and monitoring of DPM.

EASY TO USE

Designed to be used as an everyday workshop tool, the DPM-RT-2 requires minimal training, with a simple to use touch screen user interface.

The instrument is easy to use, comprising of 3 test modes: Stall Test, Free Acceleration Test and Continuous Test.

The menu guides the operator through each standardised DPM test procedure and collects the test data, allows monitoring of DPM levels in real-time while sample processing & automatically produces an overall result immediately once the test is completed. All that is required from the operator while processing samples is to monitor the screen while controlling the engine for the tool to test emissions from the engine exhaust.

LOGGING OF RESULTS

Build your baseline data on your fleet to know when further maintenance and intervention is required to improve engine performance and reduce DPM being released into the environment. Easily download from USB or over WiFi with the free DPM-RT-2 browser application for graphing and exporting results and become less reliant on hand written records.

Measurement Method	Laser light-scattering photometry
Particle Concentration Range	0 to 420 mg/m ³ (Elemental Carbon)
Resolution	0.01 mg/m ³
Sample Flow	2.0 L/min (nominal)
Accuracy	+/-18% of reading
Range Selection	Auto-Ranging
Data Logged	1 Second Timestamps, Minimum, Maximum, Average, Duration, Vehicle No, Section No, Engine No.
Zero Check	Auto-Zero prior to every test
Variance Check	One-minute span check (Variance Check Plug supplied)
PC Connection	2.4GHz Wi-Fi
USB Port	Data Download to USB Drives
Operating Voltage	9-36V DC (via external power source) or internal NiMH battery
External Power	9-36V DC 60W (Unit powered off and battery charging) 12-36V DC 60W (Unit running and battery charging)
Battery Life	2.5 hours
Operating Temperature	0°C - 40°C



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