

PINSSAR DIESEL PARTICULATE MATTER (DPM) MONITORING UNIT



RVT Group are pleased to announce that we are now a primary distribution partner for Pinssar's DPM monitoring solution in the UK. This solution will be available to customers via contract-sale or hire agreement.

This monitor is designed to measure particles smaller than 0.8 micron or 800 nanometres (nm) in real time, making them ideal for measuring DPM levels in tunnels, in line with the updated BS 6164 guidance.



Pinssar's diesel emissions monitoring solution comprises Pinssar DPR fixed monitoring units and a reporting console, the Pinssar Dashboard. This practical solution allows for data to be sent to any control system or ventilation simulation software.



Pinssar DPR

The Pinssar DPR unit is a ruggedised, fixed monitor, which works continuously to collect samples and send DPM data in real time.

Pinssar Dashboard

The Pinssar Dashboard is an easy to use and configurable HMI (interface). It records and displays samples from the Pinssar DPR in terms of values as well as internal diagnostics.



Console

Tabulates samples for the current shift and previous shifts.



Reader Status

Indicates if power is on and if the communications are active, or not operating as intended. It shows the working status of the internal components.



Reader Map

Records the location of each Pinssar DPR.



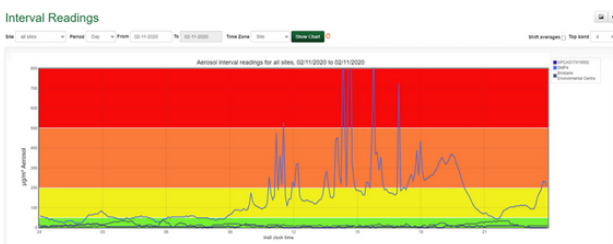
Chart

A real time visual display of samples taken.



Administration

Provides installation and site configuration details.



Technical Specification

Measurement Technique	Laser-light scattering photometry	
Concentration Range	0 to 2,500µg/m3	
Self-Cleaning	The optical cell is flushed with filtered air after each sample is taken.	
Measurement Frequency	Preset to 5 minute intervals between samples. Range from 2 mins to several hours.	
Zero Drift	Negligible; uses a proprietary auto-zero system	
Remote Management	Management of Pinssar DPR device can be done remotely via Pinssar DPM Monitoring System Server software, or an alternate client based SCADA or monitoring system.	
Size Fraction	≤ 800nm	
Particulate Type	Particulate Mass is calibrated to the response of a reference photometer gravimetrically calibrated to diesel particulate matter (< 800nm).	
Dimensions	With external filter 660mm(H) x 250 mm(D) x 740mm(W) Without external filter 660mm(H)x 250mm(D)x 675mm(W)	
Mass	35.7 kg	
Flow Rate	2.2 litres per minute	
Operating Humidity Range	0 to 90% relative humidity (non-condensing)	
Operating Temperature Range	-10°C to 50°C, 14°F to 122°F	
Enclosure Material	Stainless Steel (316 grade)	
IP Rating	IP64	
Internal Clock	Sync to UTC (require internet access)	
Sample Data Characteristics	Timestamp: Year, Month, Day, Hour, Minutes and Seconds Sample Data: Serial number, sample value, Reader status and several fields of diagnostics data. Packet size: 104 bytes	
Internal Data Storage	2GB CF Card	
Diagnostics	Several fields of diagnostics data are transferred to Pinssar DPM Monitoring System, or to an alternate client based SCADA or monitoring system	
Power Option	240 VAC, 120W Other options available on request.	
Protection	Input surge voltage (1 sec) 50 VDC Overvoltage, overload, short circuit and thermal protection Input: T3.15A/250VAC fused in line and neutral Isolation – Input to Output 4000 VAC, Input and Output to Ground 1500 VAC	
Circuit Breaker	6A manually resettable internal CB combination Residual Current Device	
Identification Labelling	Serial number plate on right hand side panel	
Data Communication Interface Options	Ethernet: 10/100Base TX (Cat5 RJ45) Wireless: LTE/UMTS (HSPDA/HSPDA+), WiFi (IEEE 802.11b,g,n) Modbus: Modbus TCP Protocol	
Compliances	EMC, RF and Safety: EN55032:2015 COR 2016 (CISPR 32:2015 Ed 2) EN301 489-1: V2.1.1 (2017-02) EN301 489-17: V3.1.1 (2017-02) EN 61000-3-2:2006, A1:2009, A2:2009 (IEC 61000-3-2:2005, A2:2009) EN 61000-3-3:2013 (IEC 61000-3-3:2013 Ed 3) FCC Title 47 CFR, Part 15 Subpart B and ICES-003 ANSI C63.2, ANSI C63.4 EN62311:2008	ICNIRP Guideline 447498 D01 General RF Exposure Guidance v06 FCC Title 47 CFR, Part 15.247(i), 1.1307(b), and 1.1310 RSS-102 Issue 5 and GL-01 Issue 3 ETSI EN 300 328 V2.1.1 (2016) ETSI EN 301 893 V2.1.1 (2017) FCC Title 47 CFR, Part 15.207, Part 15.247 EN 60950-1:2006, A1, A2, A11, A12 AS/NZS 60950-1:2015

This product is protected by U.S. Patent No 10,809,174 and other pending applications and foreign patents.

