



# Technical Specifications

Model : DPMRA02





The Pinssar diesel emission monitoring system is a practical solution which includes the Pinssar DPR fixed monitoring units and a highly configurable dashboard.

The continuous real-time data is sent to client nominated end users which can be viewed on desktop monitors, laptops, tablets or smartphone devices, as well as ventilation simulation software, SCADA and ventilation control and response systems.

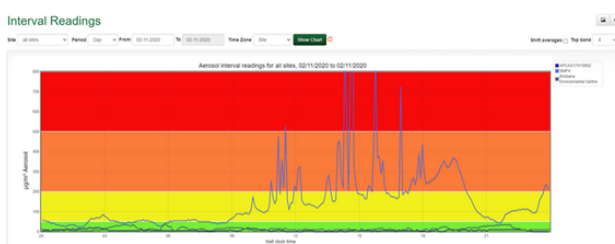


## Pinssar DPR

With 23 patented innovations, the Pinssar DPR unit is a ruggedised, fixed monitor, which operates 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 data provided from the Pinssar DPR.



### Console

Tabulates samples for the current shift and previous shifts, as well as time weighted averages.



### Diagnostics

Data is provided from 13 internal sensors to allow remote health checks and diagnostics.



### DPR Asset Map

Records the location of each Pinssar DPR.



### Dynamic View

A real time visual display of samples taken.



### Exportable Data

All data is exportable into xls format to enable reporting and analysis.



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<b>Measurement Technique</b>	Laser-light scattering photometry
<b>Concentration Range</b>	0 to 2,500µg/m <sup>3</sup>
<b>Self-Cleaning</b>	The optical cell is flushed with filtered air after each sample is taken.
<b>Measurement Frequency</b>	Preset to 5 minute intervals between samples. Range from 2 mins to several hours.
<b>Zero Drift</b>	Negligible; uses a proprietary auto-zero system
<b>Remote Management</b>	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.
<b>Size Fraction</b>	≤ 800nm
<b>Particulate Type</b>	Particulate Mass is calibrated to the response of a reference photometer gravimetrically calibrated to diesel particulate matter (< 800nm).
<b>Dimensions</b>	With external filter 660mm(H) x 250 mm(D) x 740mm(W) Without external filter 660mm(H)x 250mm(D)x 675mm(W)
<b>Mass</b>	35.7 kg
<b>Flow Rate</b>	2.2 litres per minute
<b>Operating Humidity Range</b>	0 to 90% relative humidity (non-condensing)
<b>Operating Temperature Range</b>	-10°C to 50°C, 14°F to 122°F
<b>Enclosure Material</b>	Stainless Steel (316 grade)
<b>IP Rating</b>	IP64
<b>Internal Clock</b>	Sync to UTC (require internet access)
<b>Sample Data Characteristics</b>	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
<b>Internal Data Storage</b>	2GB CF Card
<b>Diagnostics</b>	Several fields of diagnostics data are transferred to Pinssar DPM Monitoring System, or to an alternate client based SCADA or monitoring system
<b>Power Option</b>	240 VAC, 120W Other options available on request.
<b>Protection</b>	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
<b>Circuit Breaker</b>	6A manually resettable internal CB combination Residual Current Device
<b>Identification Labelling</b>	Serial number plate on right hand side panel
<b>Data Communication Interface Options</b>	Ethernet: 10/100Base TX (Cat5 RJ45) Wireless: LTE/UMTS (HSPDA/HSPDA+), WiFi (IEEE 802.11b,g,n) Modbus: Modbus TCP Protocol
<b>Compliances</b>	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

**The only practical solution for  
diesel particulate monitoring.**

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