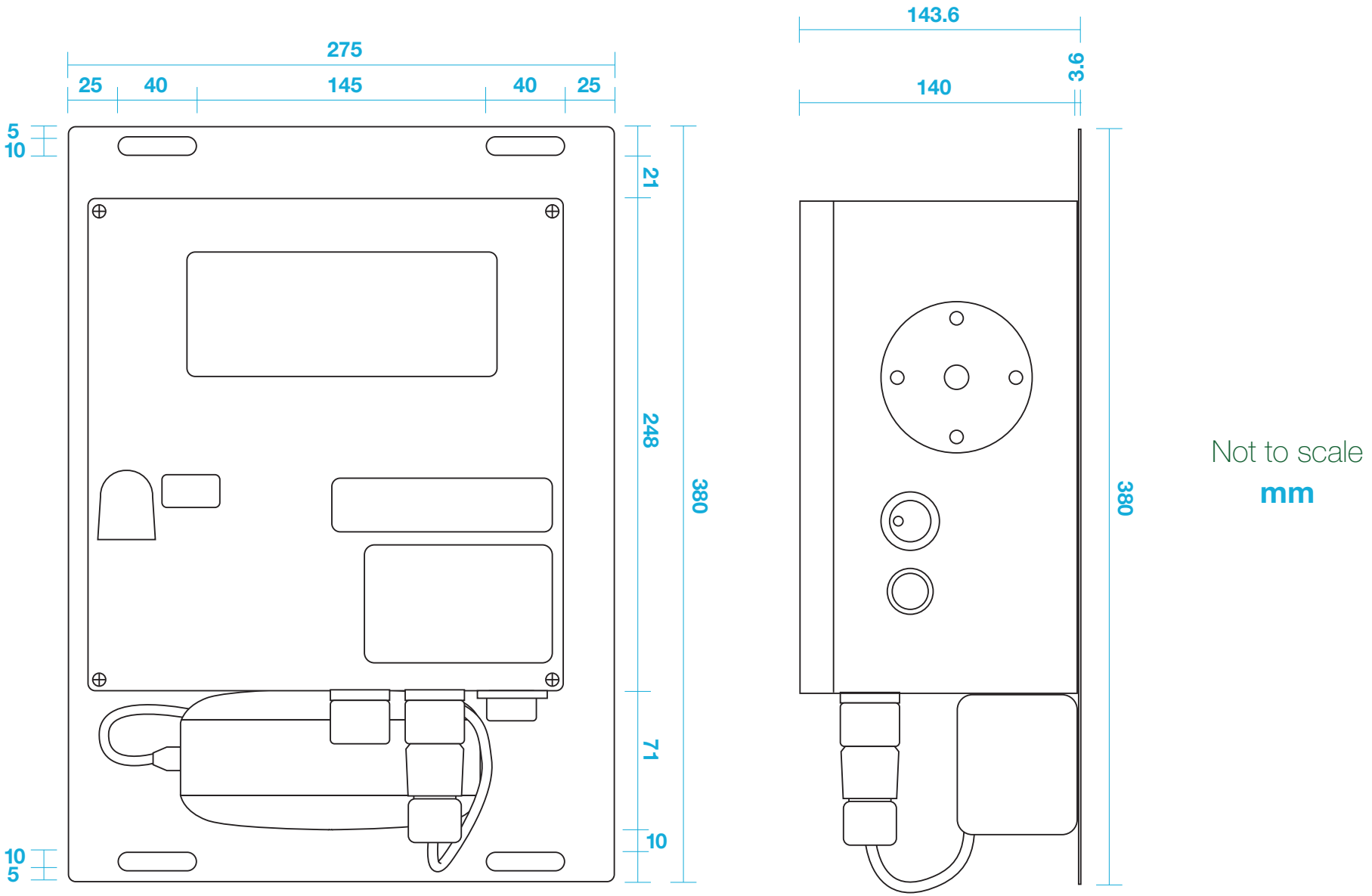
READER: Technical Specifications

Pinssar's Ambient Air Monitoring Reader is designed as a networked senor measuring the mass concentration of sub-micron particles at regular intervals. This parameter is a useful surrogate measurement of diesel particulates in underground mine environments.

Specifications

Measurement Technique	Laser-light scattering photometry.
Concentration Range	1 – 1,000 µg/m^3 in 5 µg/m^3 increments.
Self-Cleansing	Optical cell flushed after each sample with filtered air.
Measurement Frequency	Pre-set at every 5 minutes.
Temperature Drift	Negligible, uses internal auto-zero system.
Remote Control	Remotely activated start-up/shut-down function with a 'reminder' alert.
Particle Diameter Range	0.08 – 1µm.
Particulate Type	Particle mass calibrated to equivalent mass concentration of diesel particulates.
Dimensions & weight	380mm H 275mm W 144mm D; 7.8kg/14.98" H 10.83" W 5.67"D; 17.6lb.
Flow Rate	3.5 litres/minute.
Operating Humidity Range	0 – 100%. R.H.
Operating Temperature Range	minus 20 - 85° C / minus 4 - 185° F.
Enclosure	IP55 ABS. Stainless steel rear mounting bracket. Internal rubber mounts.
Internal Clock	Calibrated daily.
Data Characteristics	Data time stamped: second, minute, hour, day, month, and year. Internal diagnostic system measures 8 components simultaneously. Sample size: 15 bytes including date and all other overheads. Sample storage: up to 39 hours of data.
Power Requirement	Input voltage range: up to 13.8VDC. Capacity: 3.3AH charging capacity. 2.5AH 12VDC sealed lead acid internal battery.
Reader Reset Switch	Externally mounted ON/OFF manual switch.
Processor and Communications	Built-in IP address, external ruggedized RJ45 connection.
Identification	Large highly visible device number on the outside of the enclosure. Visible serial number also included.
Compliance	Complies with CISPA 22 class A.
Carry Case	Pelican® box.

Ambient Air Monitoring System



Not to scale

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