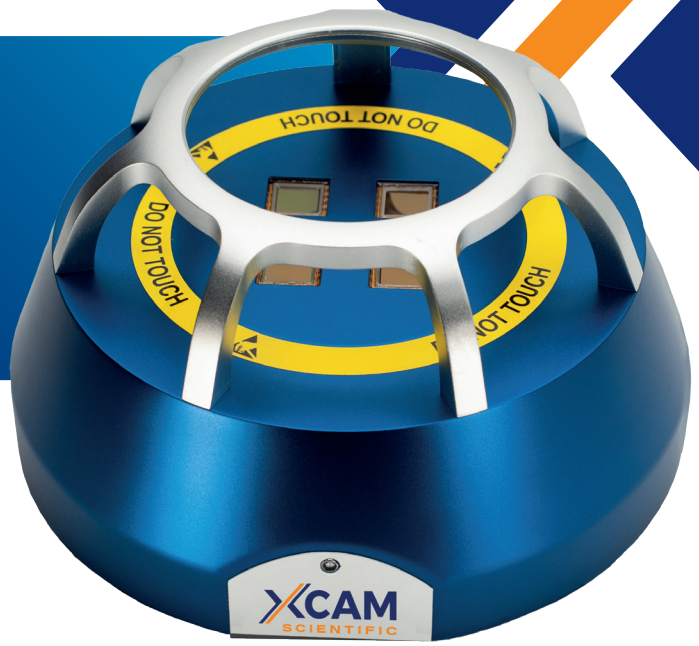
PFO MONITORS

PFO 1040



Surface particulate deposition monitor and analyser for clean environments

The **PFO 1040** provides **real-time particle monitoring and analysis**, allowing for continuous tracking of fallout trends, immediate detection of contamination events, and streamlined operations by eliminating the need for manual sample collection, reducing both time and operational costs.

Featuring XCAM Scientific's **Direct Particle Detection (DPD)** technology, the PFO 1040 uses four high performance silicon sensing to directly observe particles settling on the surface of the sensor. All four sensors operate simultaneously to maximise sample area and statistical significance of your results.

Real-time particle fallout monitoring provides actionable intelligence to:

- Prevent yield loses part way through a key process
- Identify activities which create higher contamination levels
- Monitor the effects of process improvements
- Assess the effect of new processes
- Automatically collect surface contamination statistics for project reporting

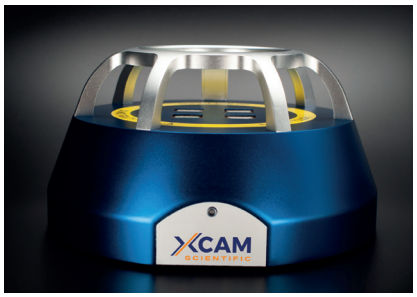
Key Application Areas:

- Clean environments and cleanroom supplies
- Semiconductor manufacturing
- Advanced manufacturing
- Automotive
- Scientific research
- Defence
- Space and Aerospace

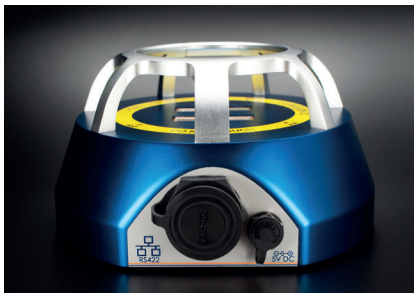
Features & Benefits

- **Automated, Real-Time Monitoring with Fast Sample Rate** allows continuous tracking with time and room activity.
- **Accurate and Reliable High-Resolution Digital System** with particle image display and software analysis for particle and fibre classification.
- **Surface Particle Monitoring from 5 µm to >750 µm** compliments airborne sensing systems that only detect smaller particles that remain suspended in the air.
- **Alerts/Alarms for Pre-Defined Limits** enables earlier action to limit contamination and avoid yield loses.
- **Reporting to IEST-STD-CC1246E Standards** to meet cleanliness levels required for contamination-critical products and processes.
- **Compact and Portable Unit** with reporting dashboard for ease-of-use.

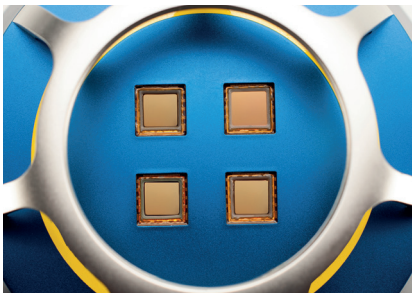
PFO 1040 Gallery



PFO 1040



Connection panel



Four high performance sensors

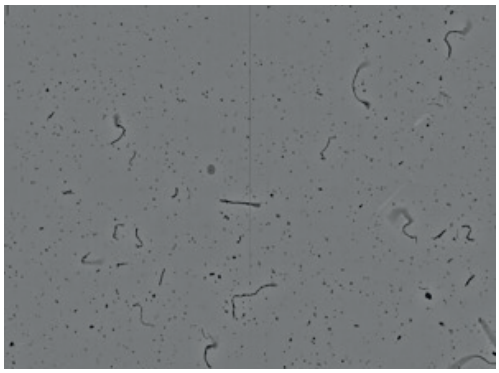
Key Specifications

Parameter	Specification
Total Detection Area	4 cm^2
Sample Rate	10 per hour
Particle Readout	Size, shape, distribution Particle/fibre classification
Particle Detection Range	5 µm to >750 µm
Alarms	Percentage area covered (PAC) alarm PFO cleanroom level alarm
Operating Temperature	+20°C to +35°C
Housing Material	Aluminium
Dimensions (L x W x H)	178 x 178 x 92 mm
Power	5 V DC
Power Supply	110-240 V AC, 400 mA
PC Interface	USB 2.0
PC Requirements	64-bit, Intel Core i7, 8 GB of RAM (recommended)

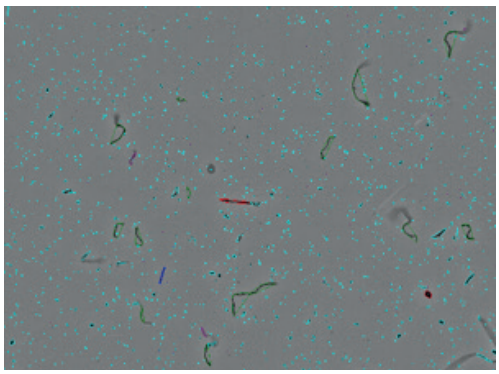
Real-time Analysis

Advanced recognition algorithms detect particle size and profile, particle count by size, percentage area covered, and a differentiation between fibres and particles. Alarms can be triggered when pre-defined limits are exceeded.

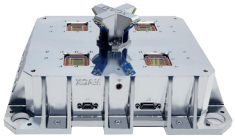
Before Annotation



After Annotation



Related Products



Space PFO

Particulate contamination monitor for space launch applications.

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