

# QIII SM™

## SURFACE PARTICLE DETECTOR 0.3-10um

### REDEFINE PRODUCTIVITY

Pentagon Technologies' line of surface particle detectors are the standard in high technology industries for measuring and controlling surface contamination. Particles that accumulate on critical surfaces or products can reduce yield and reliability. To achieve optimal performance in particle sensitive manufacturing it is important to have a quantified metric for surface contamination. The QIII Surface Metric - QIII SM, uses an advanced, patented interface to re-suspend particulate from the surface and draw them through a particle detector. **Use the QIII SM to find and eliminate the particles that cost you time and money.**

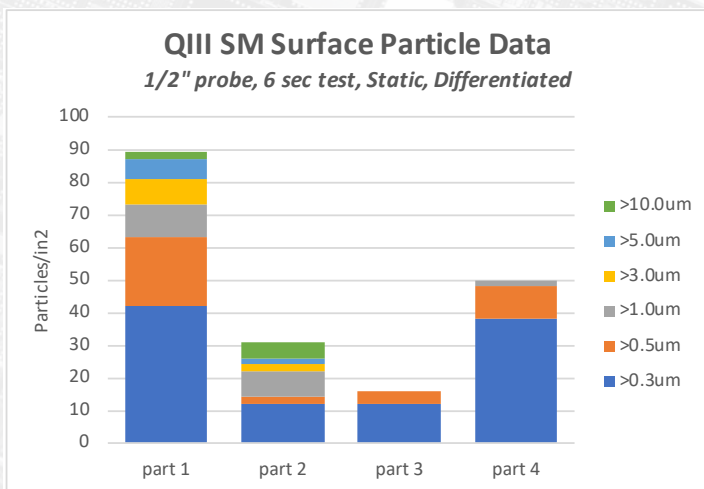


QIII SM with 2" probe

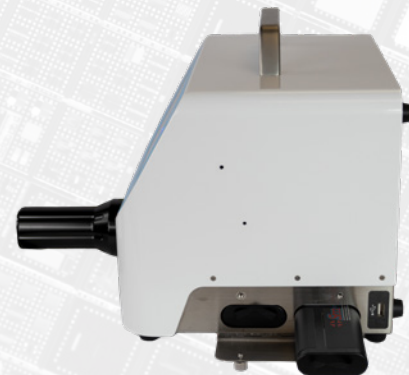
### BENEFITS

- Instant measurements of surface particulate
- Improve yield by reducing surface particles
- Minimize troubleshooting time by quickly identifying particle sources
- Monitor and set limits for particle density on incoming or outgoing materials
- Drive continuous improvement through establishing a surface particle baseline
- Test to standardized ISO 14644-9 classification of surface cleanliness
- Data integration into SPC systems.
- BKM Mode Option - to drive consistency in measurements and specifications
- Capture counted particles for analysis with optional Particle Analysis Module
- 21 CFR Part 11 Compliance for life-science applications

### SAMPLE DATA:



### QIII SM™ SIDE VIEW



Batteries and USB Port





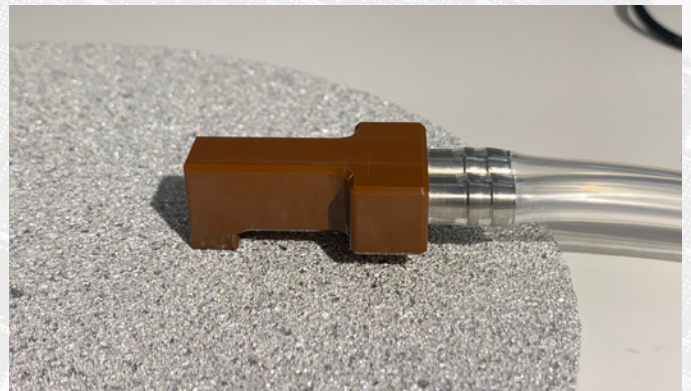
QIII SM with 1/2" Probe

## TECHNICAL DESCRIPTION

- Particle sensitivity range: 0.3um -10um
- Channels: 0.3, 0.5, 1.0, 3.0, 5.0, 10.0um
- Sensor: Laser Diode
- Size & Weight: 12" W X 10.5" D X 9" H, 18.5 lbs
- Batteries: (2) Lithium Ion, hot swappable
- Display: 7" WVGA, sealed touch screen interface with pinch zoom.
- Data Units: Particle Density and Raw counts
- Advanced user interface with Data Analysis Mode for averaging surface particle measurements
- Data Output: USB port, ethernet, optional WiFi
- Probe Included: 1/2" right angle probe.
- Purge Options Included: Purge Filter to zero count the detector and a Purge Probe Function to zero count the probe.
- Self cleaning mode with 50% increased air flow
- Input power: 100-240 VAC, 50/60 hz
- Sampling Modes: Static and Dynamic
- CE Certified
- Languages: English, Chinese, Japanese, Korean
- Made in the USA



Half Inch Probe with Jig



Fin Probe on high roughness surface

## OPTIONS

**STANDARD PROBES:** Large array of probes for measuring flat surfaces, inside pipes, gas lines, containers, or edges that are difficult to clean.

**CUSTOM PROBES:** We can design a probe to fit custom surfaces.

**PARTICLE ANALYSIS MODULE PROBE:** Capture the particles for analysis.

**BKM MODE:** Best Known Method captures measuring points, specifications, and image of surface being tested

**ROBOTIC CELL:** Connect remotely to for in-situ measurements.

**BATTERY CHARGER:** Charge an additional set of batteries.