

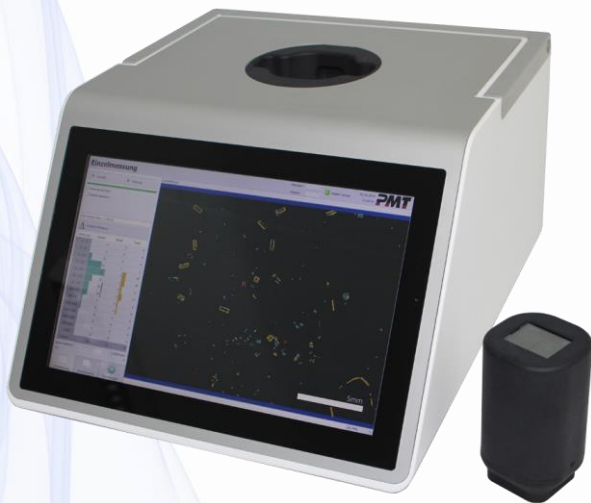
## Surface Particle Counter

PartSens® is a portable surface particle counter that directly sizes and counts particles, dust and other contamination on surfaces while leaving the surface unchanged. It is ideal to use on surfaces such as Stainless steel, Silicon, Glass and Plastic.

The cleanliness of critical surfaces is one of the most important factors for high quality products. Easy and instantaneous detection of surface contamination is essential to ensure a high-quality product is produced with little re-work. This instrument is used throughout the automotive industry in stamping areas, and in the aerospace and optical industries to improve production and limit waste.

PartSens® is ISO 16232 and VDA 19 Part 2 compliant and can be used to perform Percent Area Covered (PAC) calculations in accordance with ISO 14644-9.

The unique technology and ease of use as well as the portable design make the PartSens® system the perfect solution for companies concerned with surface contamination on the product and within the production environment.



### Features

- Portable and compact design
- Non-destructive inspection
- Single and series-based measurements
- Direct Non-Destructive measurement on surfaces
- Repeatable measurement
- Wireless Measuring Head
- Maps particle size, particle location and particle shape on surface
- Differentiates between metal particles  $\geq 25 \mu\text{m}$  and fibers  $\geq 50 \mu\text{m}$ .
- Easy touch screen user interface

The PartSens measurement system is a fully equipped instrument for the measurement of particles, including differentiating those that are metal, and dust on technical surfaces in the production area.

### Particle and Dust Detection

Glancing light technology offers reliable, reproducible, and highly accurate results without extensive test procedures using microscopes or indirect sample collection methods such as filter analysis, vacuum or liquid extraction. Particle size and count is determined within seconds.

Viewing the surface in real-time, the image processing software automatically counts and sizes particles, and differentiates metal and fiber particles  $\geq 25 \mu\text{m}$ . These data, including the live-screen, can be immediately viewed on the base unit, printed or stored for future reference and comparison.

PartSens can be configured to detect particles on various material surfaces such as aluminum, steel, stainless steel, silicon, glass or plastic.

PartSens may be set up to a given measuring task by individually defining alarm thresholds and is immediately ready to use.

### SPECIFICATIONS

Particle Size Range – Total	<5 µm to >3000 µm
Particle Size Range – Metallic	>25 µm to >3000 µm
Particle Size Range – Fibers	>50 µm to >3000 µm
Camera Resolution	3872 x 2764 pixels (10 megapixel)
Measuring Area	2.68 cm <sup>2</sup> / 19.36 mm x 13.82 mm
Zero Count	0 Particles
Measurement Types	Single Measurement, Serial Measurement
Sample Memory	~16 GB (300 samples)
Relevant Standards	DIN ISO 14644-9; DIN ISO 16232; VDA 19 Part 2
Data & Output Connections	USB Type A, TCP/IP Network (service port only), HDMI
Languages	German, English, French, Japanese
Printer	External Bluetooth Thermal (Optional)
Power Supply AC Input / DC Output	100-240V AC 1.4A 50/60 Hz / 24 VDC @ 5.0 A
Batteries	Replaceable & Rechargeable Li-Ion, <6 Hour Operation
<b>Base Station</b>	
– Dimensions	386 D x 330 W x 210 H mm (15.2 x 13 x 8.3 inches)
– Weight	7.7 kg (17 lbs)w/ batteries, 6.7 kg (14.7 lbs) w/o
– Housing Material	Polyurethane, Synthene PR700
– Screen	307 mm (12.1”) TFT Touchscreen
<b>Measuring Head</b>	
– Communications	WLAN 2.4 GHz (10 meter / 33 feet Range)
– Dimensions	65 W x 65 D x 110 H mm (2.6 x 2.6 x 4.3 inches)
– Weight	28 g (9.4 oz)
– Housing Material	Polyurethane, Synthene PR700
– Screen	45 mm (1.77”) Touchscreen
– Contact Area	48 mm x 48 mm (1.9” x 1.9”)
Operating Conditions	5°C to 30°C; 20% to 95% RH, non-condensing
Storage Conditions	0°C to 50°C; <98% RH, non-condensing
Warranty	12 months
Accessories (Included)	Quick Guide, USB stick incl. operating instructions, power cable, 24V power supply, 2 lithium-ion batteries, measuring device for Ø 36 mm tape lift pads, sample Ø 36 mm tape lift pads, Calibration Certificate
Accessories (Optional)	Bluetooth thermal printer, paper rolls, particle traps/particle strip pads, measuring device for particle traps/particle strip pads, 2-slot battery recharger, carrying case

This specification sheet is subject to change without notice.

