

# PartSens 4.0 / PartSens+ 4.0

Portable measuring system for particle measurement on surfaces according to ISO 16232 (VDA19) and I4644-9

**PMT**  
www.pmt.eu

The PartSens 4.0 device is a portable measuring system with a wireless measuring head for direct measurement of impurities on surfaces.

The PartSens+ 4.0 differentiate between **metallic and non-metallic particles, fibers, dust and other impurities** on surfaces.

Mobile design and easy operation make this instrument the perfect solution for companies that want to verify the cleanliness of surfaces.

The use of glancing light technology according to ISO 14664-9 allows for reproducible and highly accurate measurement results.

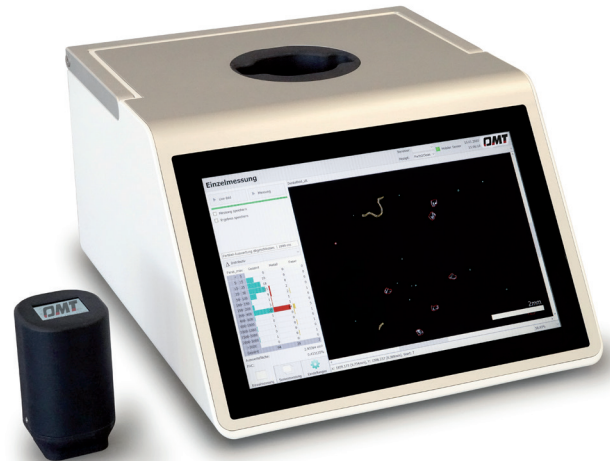
Using the PartSens eliminates complex sampling by gas extraction and subjective measuring methods such as microscopy or faulty multi-stage procedures such as surface rinsing and subsequent filter analysis.

PartSens4.0 determines particle size and the number of particles directly. The measurement result – including the live image – is immediately displayed on the instrument via wireless transmission.

For data archiving or later comparison, the data is stored in the particle counter and can be uploaded as a csv-file on a USB stick or printed out via an external printer.

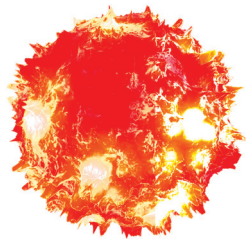
The live image allows the detection of type (metallic or non-metallic), position and morphologia of the particles.

The system can be used on various surface materials such as stainless, silicon, glass and plastic.



- Portable surface particle counter with wireless measuring head
- Measuring principle according to ISO 14644-9
- Particle measuring range:
  - PartSens 4.0: 2 µm – > 3000 µm
  - PartSens+ 4.0: 2 µm – > 3000 µm
- Size and number of metallic and non-metallic particles and fibres
- Particle size allocation according to VDA 19 and ISO 16232 possible
- active measuring area 2.675 qcm (19.36 mm x 13.82 mm)
- Measuring time < 10 seconds
- Data output and live on 12" TFT touch screen
- Instrument data-storage volume: 300 measurements
- External datatransfer: USB-Typ-A-Interface

Benelux - France - GB Together we create Solutions Germany - Switzerland - USA



# PartSens 4.0 / PartSens+ 4.0

Portable measuring system for particle measurement on surfaces according to ISO 16232 (VDA19) and I4644-9



Size range	PartSens 4.0 /PartSens+ 4.0 2 µm – > 3000 µm
Size channels (µm)	2 µm < 5 µm, 5 µm < 15 µm, 15 µm < 50 µm, 50 µm < 100 µm, 100µm < 150 µm, 150 µm < 200 µm, 200 µm < 400 µm, 400 µm < 600 µm, 600 µm < 1000 µm, 1000 µm < 1500 µm, 1500 µm < 2000 µm, > 3000 µm
Non-Metallic particles	> 2 µm
Metallic particles	> 25 µm
Fibres	> 50 µm
Measuring area	2,675 cm <sup>2</sup> (19,36 mm x 13,82 mm)
Zerocount	0 Partikel
Types of measurements	Single measurements; Serial measurements
Display modes	Distributiv; Distributiv /1000 cm <sup>2</sup> Cumulative; Cumulative /1000 cm <sup>2</sup>
Internal cummunication	WLAN 2,4 Ghz
External datatransfer	USB-Typ-A-Interface
Outputs	Network(TCP/IP), USB Typ A, HDMI
Instrument data-storage volume	300 measurements
Alarm	Touchscreen: red cell marked with a “*” Printout: marked with a “*”
Display base station	12.1” - TFT touch screen
Display measuring head	LCD-touch screen
Languages	German, English, French, Japanese
Material base station/ measuring head	Polyurethan Synthene PR700
AC voltage (Voltage to AC adapter)	100-240V AC-1,4A 50/60Hz - Universal-Powersupply
DC voltage (Voltage to Base Station)	24VDC @ 5.0 A
Battery	replaceable / rechargeable lithium-ion batteries
Range mobile measuring head	max. 10 meters
Runtime of the base station in battery mode	up to 6 hours
Dimensions base station (h x d x w)	210 mm x 386 mm x 330 mm
Dimensions Mobile Measuring Head (h x d x w)	110 mm x 65 mm x 65 mm
Contact surface area mobile measuring head	48 mm x 48 mm
Standards (based on)	DIN ISO 14644-9; DIN ISO 16232;VDA 19 Part 2
Weight	7,7 kg with batteries, 6,7 kg without batteries
Warranty	12 months
Operating range	5 °C bis +30 °C; 20 % to 95 % RH, noncondensing
Storage range	0 bis 50°C; up to 98 % RH, noncondensing

Benelux - France - GB Together we create Solutions Germany - Switzerland - USA