

PartSens 4.0 / PartSens+ 4.0

Portable measuring system for particle measurement on surfaces according to ISO 16232 (VDA19) and 14644-9*



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, non-metallic particles and fibers 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.

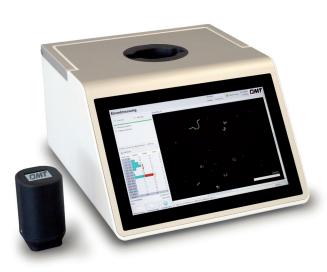
Using the PartSens eliminates complex sampling by gas extraction and subjective measuring methods such as microscopy or faulty multi-stage procedures such as surface rinsing and subsequent filter analysis.

PartSens4.0 determines particle size and the number of particles directly. The measurement result – including the live image – is immediatley 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 morpholigia 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: < 5 μ m to > 3000 μ m
- 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 2.68 qcm (19.36 mm x 13.82 mm)
- Measuring time < 10 seconds
- Data output and live on I2" TFT touch screen
- Instrument data-storage volume: 300 measurements
- External datatransfer: USB-Typ-A-Interface

PMT Partikel-Messtechnik GmbH Schafwäsche 8 D-71296 Heimsheim

Tel. +49 7033 5374-0 Fax +49 7033 5374-22 Email: info@pmt.eu





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Size range	< 5 µm to > 3000 µm
Size channels (µm)	< 5 μm, 5 μm – 15 μm,
Size channels (µm)	$15 \ \mu m$ = 50 μm, 50 μm = 100 μm,
	$100 \mu m - 150 \mu m$, $150 \mu m - 200 \mu m$,
	200 μm – 400 μm, 400 μm – 600 μm,
	600 μm – 1000 μm, 1000 μm – 1500 μm,
	1500 μm – 2000 μm, > 3000 μm
Metallic particles / Non-Metallic particles	$> 25 \ \mu m$ to $> 3000 \ \mu m$ / $< 5 \ \mu m$ bis $> 3000 \ \mu m$
Fibres	> 50 μm to > 3000 μm
Measuring area	2,68 cm ² (19,36 mm x 13,82 mm)
Zerocount	0 Particles
Types of measurements	Single measurements; Serial measurements
Display modes	Distributiv; Distributiv /1000 cm ²
	Cumulative; Cumulative / 1000 cm ²
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	Polyeurethan Synthene PR700
AC voltage (Voltage to AC adapter)	100-240V AC-1,4A 50/60Hz - Universal-Powersupply
DC voltage (Voltage to Base Station)	24 VDC @ 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 $(h \times d \times w)$	210 mm x 386 mm x 330 mm
Dimensions Mobile Measuring Head $(h \times d \times w)$	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

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022021VI