PaintChecker mobile

The OptiSense PaintChecker mobile devices accurately measure wet, powdery and solid coatings on metallic and non-metallic substrates without touching the surface. The compact and lightweight handheld units are ideally suited for continuous and effortless use in laboratory and production.

HIGHLIGHTS

- Contactless photothermal process for many material combinations
- Small measuring spot to accurately check small parts, corners and edges
- The sensor ist separated from the hand-held unit to easily access hard-to-reach areas
- Robust semiconductor technology for long battery life
- Intuitive operation via three-point illuminated visor and acoustic feedback
- Measurement result and analysis can be read at a glance on the large, clear display
- USB interface for data transfer and analysis with PC and Excel

PaintChecker mobile *Laser Pen*

The OptiSense mobile laser models are mainly used for smooth coatings on metallic substrates. With their tiny measuring spot the slim laser sensors are particularly suitable for coating thickness testing on delicate small parts, corners and edges.

A special version with an extra short working distance allows you to measure in very confined spaces or on coatings containg high amounts of metal. All OptiSense mobile models are eye-safe thanks to the patented LARES® technology.

PaintChecker mobile *Gun-R*

LED sensors feature a larger measuring spot making them ideal for freehand measurements on rough surfaces. The Gun-R model is particularly suitable for components made of plastic or rubber. The sensor head of all OptiSense mobile models is detached from the control unit and connected with a flexible cable.

The lightweight, ergonomically designed sensor can be carried comfortably in a holster and guided precisely and effortlessly to the component without touching or damaging the sensitive coating.

PaintChecker mobile *Gun-B*

The mobile OptiSense Gun-B is designed for contactless testing of freshly applied powder coatings prior to burn-in. It measures the still soft powder layer independent of colour and type on substrate such as metal, wood, glass or plastic. The shrinkage during burn-ins is taken into account.

With a simple measurement directly after the powder application, the very cost-intensive rework of overcoating can be avoided, especially for large components.

PaintChecker mobile

Technical Data | PaintChecker mobile Sensors				
Model	**Pen-1.6**	**Pen-3.5**	**Gun-R**	**Gun-B**
Design	Laser, pen-shape		LED, pistol-shape	
Measurement range	1 - 1000 µm			
Measurement rate	max. 0.5 Hz			
Measurement time	250 - 1000 ms		250 - 2000 ms	
Operating mode	pulsed operation			
Resolution	1 % of reading (typical)			
Accuracy	3 % of reading (typical)			
Measuring distance from lens	16 mm	35 mm	33 mm	
Distance tolerance	± 1 mm	± 2.5 mm	± 3 mm	
Angular tolerance	± 15 °			
Size of measuring field Ø	0.2 mm	0.3 mm	1 mm	
Optical power	650 mJ		750 mJ	250 mJ
Wavelength	1470 nm		980 nm	365 nm
Laser class	1M		Risk 1	Risk 3
Eye safety	yes			
Dimensions (L x W x H)	130 x Ø25 mm		163 x 99 x 49.5 mm	
Weight	50 g		225 g	
IP Code	IP 50			
Standards	DIN EN 15042-2			
control unit	mobile-Laser		mobile-R	mobile-B

Security Redefined
LARES® -technology

OptiSense LARES® stands for **LA**ser **R**adiation **E**ye **S**afety and is the intelligent solution to ever-increasing requirements in the field of person and eye protection, which set the strictest standards, especially when handling lasers.

Thanks to our patented LARES® technology, operators, machinery and environment at the manufacturing and processing location are reliably protected.

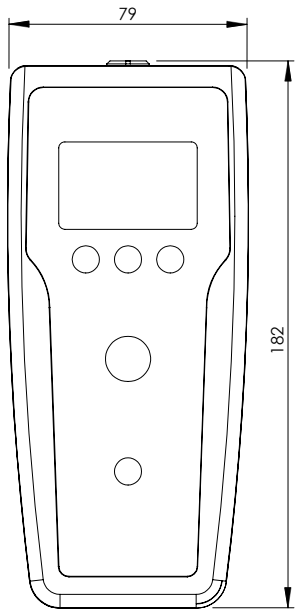
All sensors with the LARES® logo are eye-safe. They can be used directly and without any restrictions in almost all areas of application and can be operated without anytechnical protection measures.

The designation of a laser protection supervisor, which is mandatory for laser radiation hazardous to eyes, and the briefing and instructing the operating personnel, which must be properly documented, can thus be omitted with.

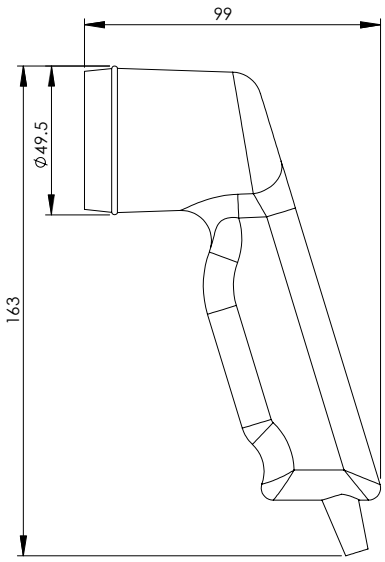
PaintChecker mobile

Technical Data | PaintChecker mobile Control Unit			
Model	mobile-Laser	mobile-R	mobile-B
Design	Mobile handset, Aluminium casing with protective holster		
Rechargeable battery	4 x Li-Ion		
Battery life	ca. 10 h		
Interface	PC: USB		
Dimensions (L x W x H)	182 x 79 x 43 mm		
Weight	700 g		
Standards	DIN EN 15042-2		

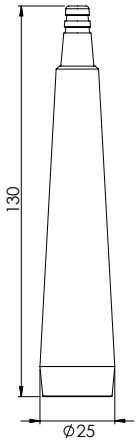
Drawing | PaintChecker mobile Controller and Sensors



Controller



Gun-R, Gun-B



Pen

Delivery Contents | Accessories

Delivery Contents

- Sensor with connecting cable
- Control unit, including protective holster
- Li-ion battery pack, including replacement battery pack
- Quadruple charger
- OS Manager software
- Instruction manual (digital)
- Sturdy hard case
- Type-1 reference standard
- USB cable

Accessories

- Calibrations for special applications
- Tripod

Anwendungsmatrix | PaintChecker mobile						
Substrate	**Coating**	**Coating Condition**	**Pen-1.6**	**Pen-3.5**	**Gun-R**	**Gun-B**
Metal	CDC	dry	■			
	Pigmented paint	wet / dry	■	■	■	
	Clear coat	wet / powdered	■	■	■	
	UV paint	wet / cured	■	■	■	
	Zinc dust	dry	■	■		
	Bonding agent	wet / cured			■	
	Powder coating	powdered			■	
	Adhesive	wet / dry		■	■	
	Rubber coating	dry		■	■	■
Rubber	Bonded coating	dry		■	■	
	Adhesive	wet / cured		■	■	
Ceramic	Pigmented paint	dry		■	■	
	Powder slurry	pre-dried			■	
	Conductive paste	pre-dried		■	■	■
Glass	Pigmented paint	wet / dry	■	■	■	
	Bonding agent	pre-dried	■	■	■	
	Conductive paste	pre-dried	■	■	■	■
Plastic	Bonding agent	wet / dry			■	
	Laser paint	dry	■	■	■	
	Clear coat	wet / dry		■	■	
	Powder coating	powdered			■	
	Rubber coating	dry			■	■

Note: Some applications require special system calibration, which OptiSense offers.

WEEE-Reg.-No. DE 69647320
DIN EN ISO 9001:2022 certified
Version 22.01

OptiSense GmbH & Co. KG
Annabergstraße 120
45721 Haltern am See
GERMANY

Phone +49 2364 50882-0
Mail info@optisense.com
Web www.optisense.com