



More Precision

New Products | Innovative Sensor Technologies



designed for advanced

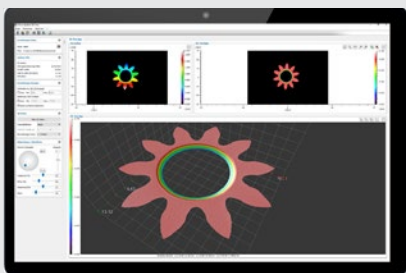
AUTOMATION

surfaceCONTROL 3D 3500

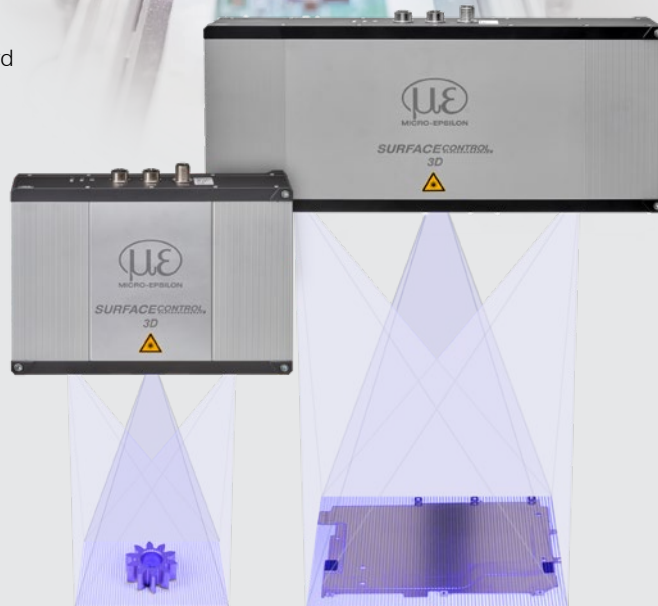
3D snapshot sensors with highest precision

- Precise inline inspection of geometry, shapes and surfaces
- Highest repeatability up to $0.25\text{ }\mu\text{m}$
- Up to 2.2 million 3D points / second
- State-of-the-art interfaces with GenICam and GigE Vision standard
- Real 3D-Data with highest image quality
- Easy integration in all common 3D image processing packets

NEW: surfaceCONTROL 3500-30
with Z and X/Y-axis precision



Parameter setting and evaluation of Micro-Epsilon 3D sensors are performed via the 3DInspect software.



Z-axis precision $<0.25\text{ }\mu\text{m}$

XY-resolution $8\text{ }\mu\text{m}$

scanCONTROL

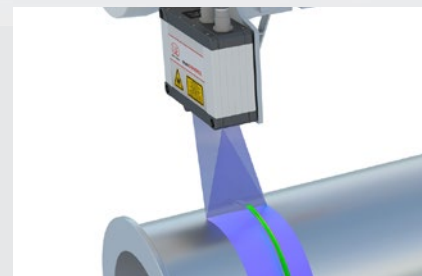
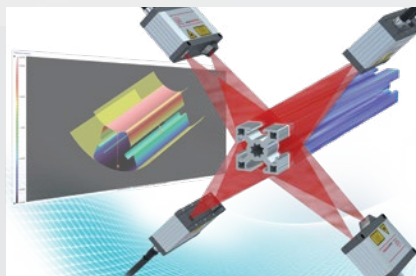
Laser profile sensors for fast 2D/3D scans

- Compact size with integrated evaluation: no external controller required
- Powerful software for parameterization and visualization
- 33% more measurement points for detailed laser scans
- Increased SMART evaluation speed by up to 60%
- High speed profile evaluation up to 10 kHz directly in the sensor

NEW: 3D Profile Unit for automated profile evaluation and 3D inspection of complex geometries

Measuring ranges up to $600 \times 600\text{ mm}$

Profile rate up to 10 kHz





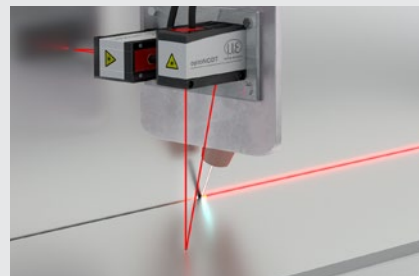
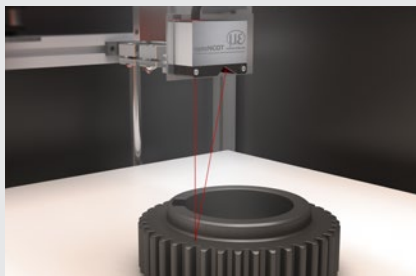
optoNCDT

Smart laser sensors with outstanding precision and speed

- Compact sensors with integrated controller
- Advanced Surface Compensation for fast adaption to changing surfaces
- Highest immunity to ambient light
- Easy integration: fieldbuses, analog and digital outputs
- Ideal for series integration in automation & machine building

NEW: optoNCDT 5500 for highly dynamic measurement tasks with highest precision

Measuring ranges	10 to 200 mm
Measuring rate	75 kHz
Repeatability	$\leq 0.15 \mu\text{m}$



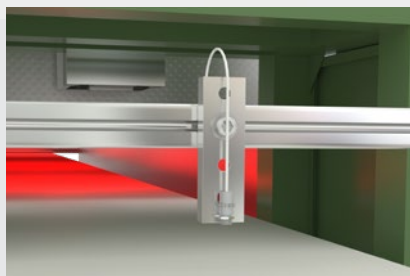
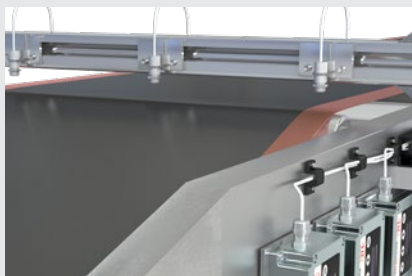
thermoMETER

High performance industry pyrometers for industrial series applications

Measuring ranges	-50 to 900 °C
Spectral range	8 to 14 μm

- First-class signal quality for highest reliability
- Best temperature stability for more precision even with strongly fluctuating ambient temperatures
- Individual sensor configuration via sensorTOOL Software
- Perfectly customizable for OEM: presets, hardware and software modifications
- Wide range of integration options via analog and digital interfaces or fieldbus

NEW: Modern IR pyrometers for industrial applications



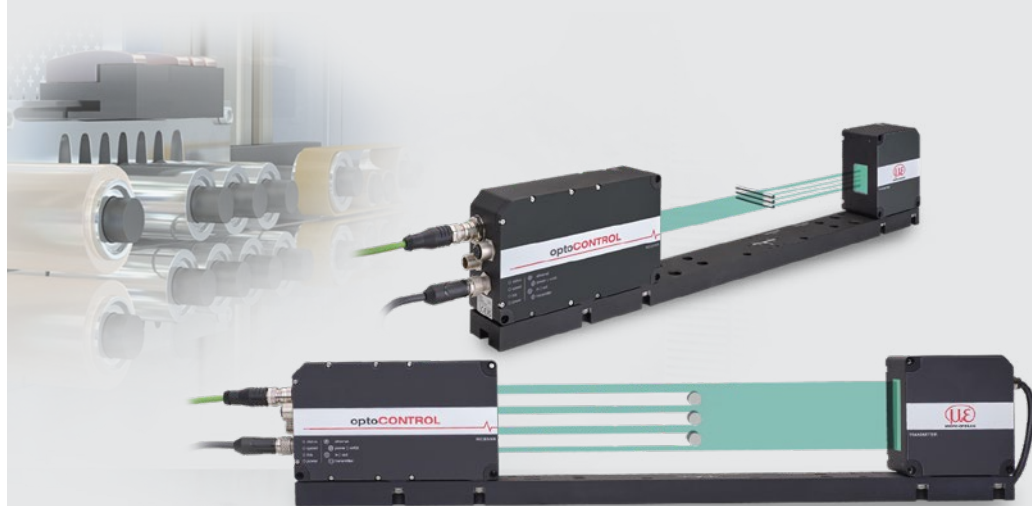


optoCONTROL 2700

High-performance micrometer
for the highest demands

- Precise measurement of diameter, gap and segment
- High measurement accuracy and sampling rate
- Measures tiny objects from 0.05 mm
- High resistance to ambient light
- Robust aluminum housing (IP67)
- Ideal for fast and precise production monitoring

NEW: 10 mm measuring range for high precision measurements, e.g. roller gap



Measuring ranges	10 / 40 mm
Sampling rate	15 kHz
Linearity	$\leq 0.5 \mu\text{m}$

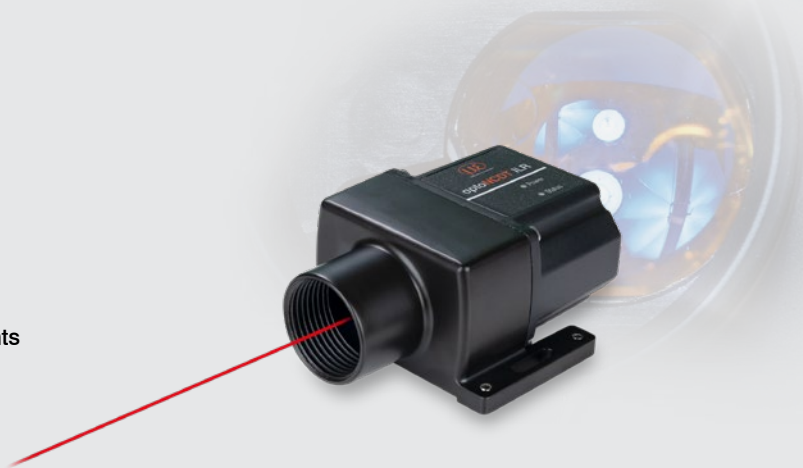


optoNCDT ILR

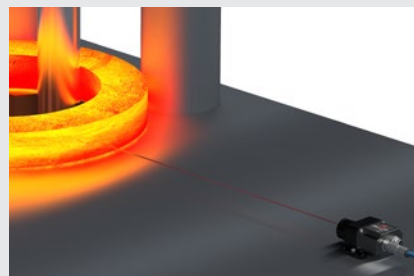
Non-contact distance and displacement
measurements with high precision

- Precise measurement of displacement, distance & position on different surfaces
- Large measurement areas for indoor and outdoor use
- High repeatability
- Fast response time
- Numerous interfaces: RS422, RS232, PROFINET, Ethernet/IP, IO-Link

NEW: optoNCDT ILR 3800 for precise distance measurements in industrial applications



Measuring ranges	up to 270 m
Repeatability	$< 300 \mu\text{m}$





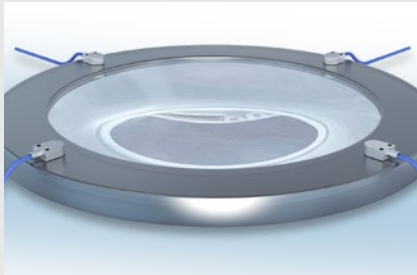
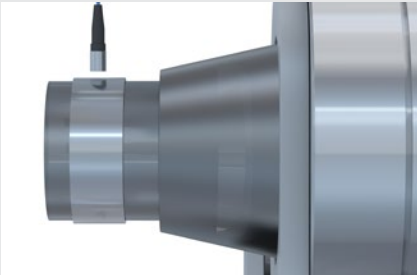
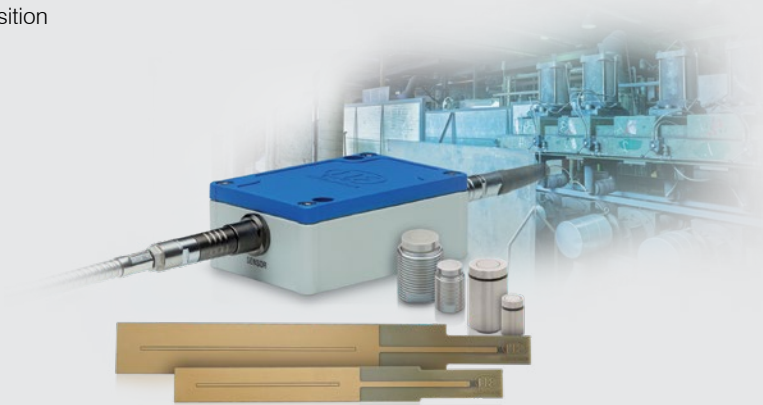
capaNCDT

Capacitive displacement sensors for high precision distance measurements

Measuring ranges	0.05 to 10 mm
Resolution	from 0.03 nm
Measuring rate	up to 20 kHz

- High precision measurement of displacement, distance, gap & position
- World's most modern product portfolio for various applications
- Industrial-grade sensor portfolio and robust controller
- Highest interference immunity to electromagnetic fields
- Voltage output / digital interface RS485
- Optimized for series in industrial and semiconductor applications

NEW: High temperature sensors for use up to 800 °C



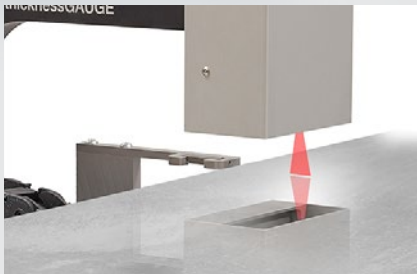
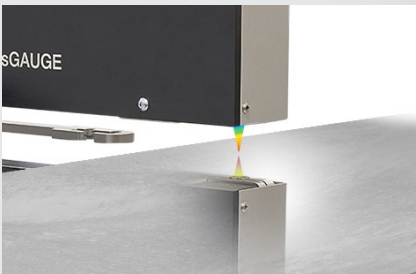
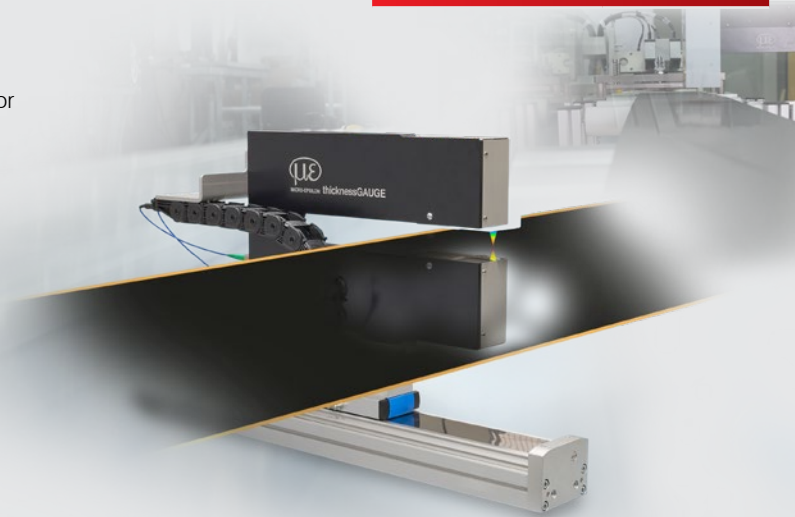
thicknessGAUGE

Sensor system for precise thickness measurement

Material thickness	up to 25 mm
Resolution	from 0.04 μm
Measuring rate	up to 5 kHz

- Compact system for precise inline thickness measurement
- For many types of surfaces and materials due to different sensor technologies
- Traverses via linear axis
- Fully automatic calibration
- Powerful software package included

NEW: thicknessGAUGE 3D for 3D geometry measurement of strips and plates





confocalDT

High precision confocal sensors

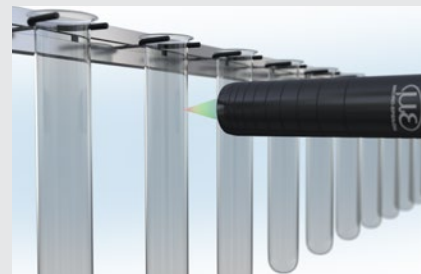
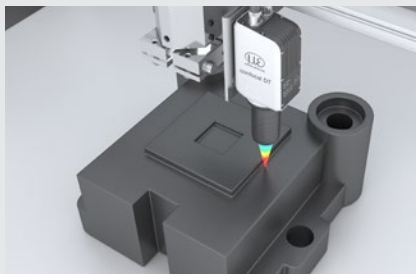
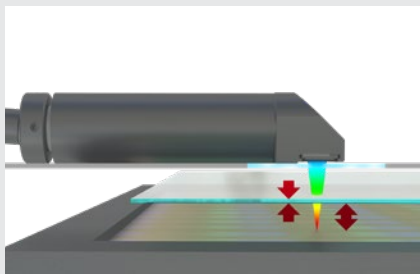
- High-resolution displacement & distance measurements on almost all surfaces
- Reliable thickness measurement of glass and transparent objects
- Extremely small measurement spot for the detection of smallest objects
- Wide range of sensors for numerous applications: All-in-one sensors and compact controllers
- Cutting-edge technology: fastest controller, largest tilt angle & smallest light spot

NEW: IFC2416 controller for fast and highly dynamic measurements

Measuring ranges 0.1 to 30 mm

Resolution from 3 nm

Measuring rate up to 30 kHz



interferoMETER

High-precision absolute interferometers for industry and semiconductors

Measuring ranges up to 2.1 mm

Resolution < 30 pm

Measuring rate up to 24 kHz

- Absolute distance measurement and multi-peak distance measurement
- Distance-independent thickness measurement, multi-layer thickness measurement and wafer thickness measurement
- Highest resolution and linearity
- Highest signal stability and active temperature compensation
- Industry optimized sensors with robust metal housing and flexible cables

NEW: interferoMETER IMS5200 for high precision layer thickness measurement

