

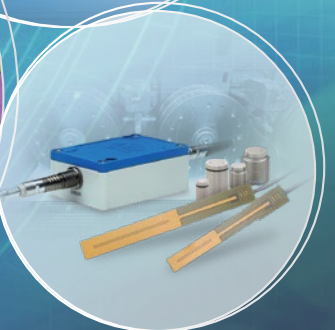
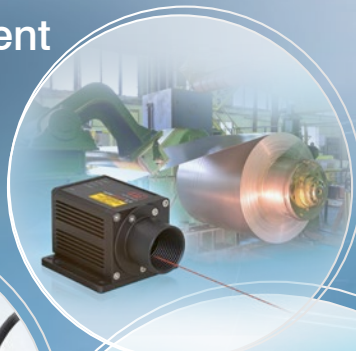


More Precision

➤ New Products | Innovative Sensor Technologies

Displacement
Distance
Position

3D Measurement
Temperature
Color

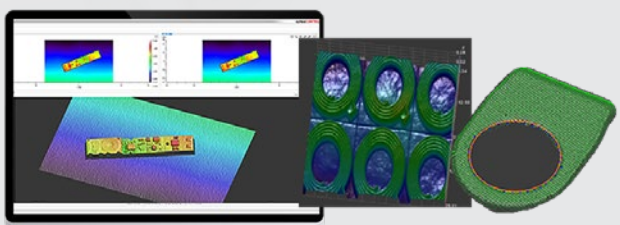
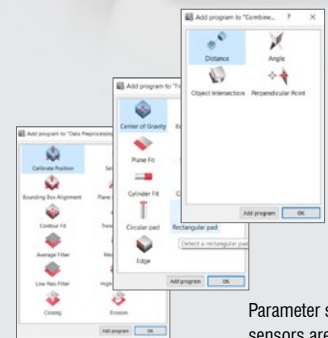
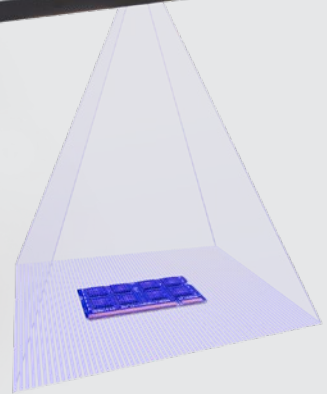
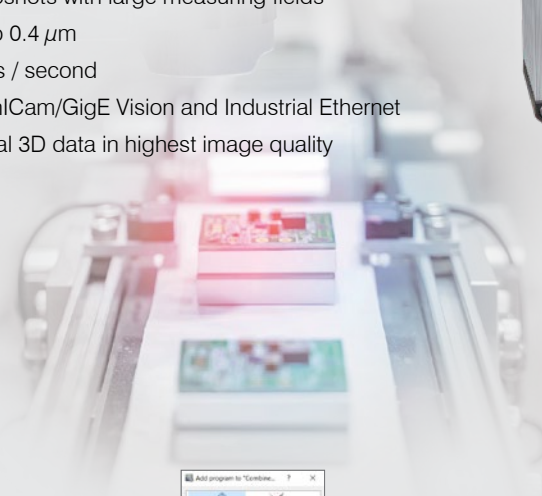


surfaceCONTROL 3D 3500 **NEW**

Precise 3D snapshot sensors

Precise inline inspection of geometry, shapes and surfaces

- Micrometer-accurate snapshots with large measuring fields
- Highest repeatability up to $0.4 \mu\text{m}$
- Up to 2.2 million 3D points / second
- High compatibility via GenICam/GigE Vision and Industrial Ethernet
- Valid3D Technology for real 3D data in highest image quality



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

reflectCONTROL

Inline 3D inspection of shiny surfaces

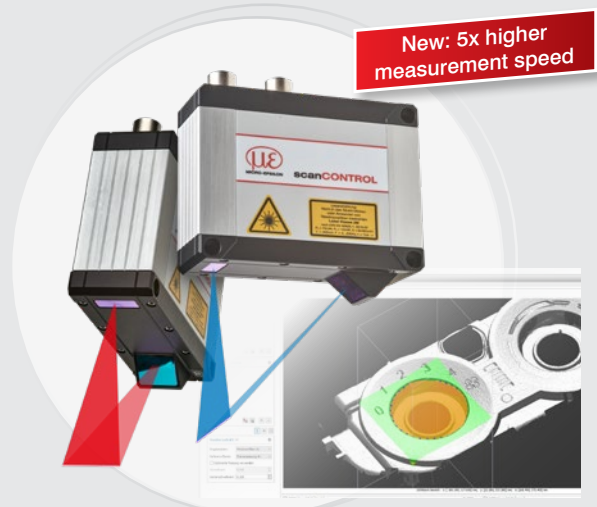


Inline 3D Snapshots for flat glass, mirrors and wafers

- Complete inspection of reflecting and shiny surfaces
- Highest z-accuracy $< 1 \mu\text{m}$
- Fastest 3D inspection $< 1 \text{ s}$
- High compatibility via different interfaces

scanCONTROL

Laser profile sensors for fast 3D scans



Powerful laser scanner portfolio

- Precise laser line scanners for 3D point clouds
- Red laser & patented Blue Laser Technology
- High resolution up to 2048 points/profile
- Measuring rates up to 10,000 kHz
- One sensor design for all measuring ranges

>> induSENSOR Inductive sensors (LVDT)

Inductive sensors in various measurement tasks & industries

- Wear-free and maintenance-free displacement and position measurements
- Compact designs, ideal for integration into machinery
- Robust and industrial-grade sensor designs
- Ideal price/performance ratio for serial applications

Measuring range	1 to 630 mm
Resolution	from 1.5 μ m
Measuring rate	Up to 300 Hz

induSENSOR MSC7x0x

Single- and multi-channel controller for industrial measurement tasks

PROFI
NET
EtherNet/IP
EtherCAT

NEW



>> wireSENSOR Robust draw-wire sensors

Draw-wire displacement sensors for industry, mobile machines and lifting technology

- Large measuring ranges and high accuracy
- Long-life sensor with robust housing
- Compact design for flexible integration
- Ideal for OEM adaptations and serial applications

Measuring range	50 to 50,000 mm
Output type	Analog & digital

wireSENSOR K-Series

Robust draw-wire sensors for precise measurements up to 5 m

NEW



>> optoNCDT ILR Laser distance sensors

Non-contact distance and displacement measurements with high precision

- Precise measurement of displacement, distance & position on different surfaces
- Large gauging and measuring range for both indoor and outdoor use
- High repeatability
- Fast response time
- Compact design without external controllers
- Numerous interfaces

Measuring range	up to 3000 m
Resolution	from 0.1 mm



IO-Link
inside

optoNCDT ILR 2250

Best-in-class:
Compact design, high signal stability
and millimeter accuracy

NEW



>> optoCONTROL Optical precision micrometers

Compact laser micrometer with integrated controller

- Micrometer-precise detection of diameter, gap and edge
- Large measuring ranges up to 95 mm
- Variable distances up to 2 m
- Laser class 1M
- Configurable via web interface

Measuring range	up to 95 mm
Resolution	from 1 μ m
Measuring rate	max. 100 kHz



90° receiver for restricted installation space

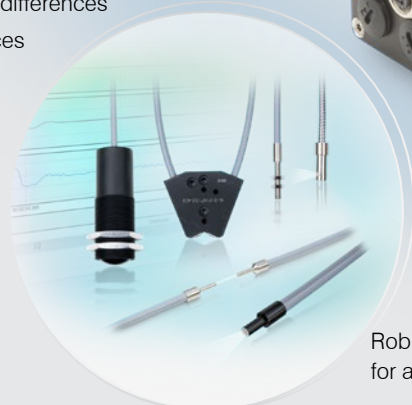


>> colorSENSOR Precise color sensors

Compact True Color sensor for fast inline quality control

- High measurement accuracy for the detection of slightest color differences
- Precise and fast measurements even on poorly reflecting surfaces
- Intuitive operation and configuration
- Numerous sensors: standard, circular, reflex and transmission
- Ethernet and RS232 process interfaces

Accuracy	$\Delta E \geq 0.3$
Measuring rate	max. 30 kHz



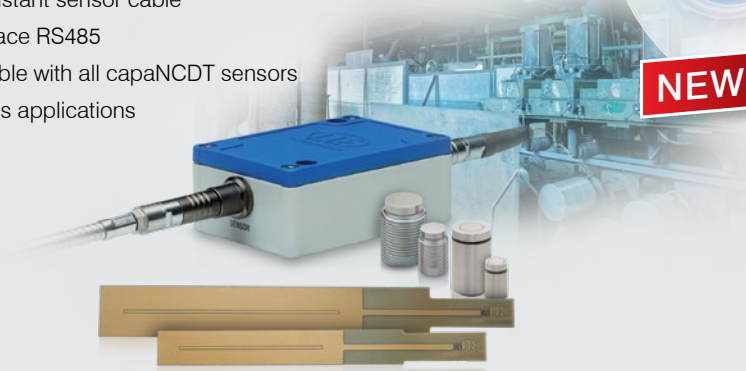
Robust fiber optic sensor for all surfaces

>> capaNCDT Capacitive sensors

Capacitive measuring system for industrial applications

- High precision measurement of displacement, distance, gap & position on electrically conductive objects
- Dust-proof and watertight aluminum die-cast housing (IP68)
- Industrial-grade sensor portfolio
- Robust and temperature-resistant sensor cable
- Voltage output / digital interface RS485
- Compact controller, compatible with all capaNCDT sensors
- Optimized for industrial series applications

Measuring range	0.05 to 10 mm
Resolution	from 0.03 nm
Measuring rate	Up to 20 kHz



NEW

capaNCDT CST6110

Capacitive rotation speed sensor system for counting tasks and speed measurements



>> eddyNCDT Inductive sensors based on eddy currents

Powerful eddy current measuring system for harsh environments

- Precise and high speed measurement of displacement, distance & position on any metal
- Robust design for demanding industrial environments
- Resistance to pressure, fluctuating temperatures, dirt, dust, oil & water
- Modern fieldbus connection and smart signal processing
- Optimized for industrial series applications

Measuring range	0.4 to 80 mm
Resolution	from 0.02 μ m
Measuring rate	Up to 20 kHz



eddyNCDT 3070

High precision controller for measuring ranges <1 mm



>> thicknessGAUGE Sensor system for inline thickness measurements

Compact complete solution for precise inline thickness measurements

- For many types of surfaces and materials due to different sensor technologies
- Traversing sensors on linear axis
- Fully automatic calibration
- 24 V supply for the entire system
- Powerful software package included
- Optimal price/performance ratio

Measuring range	2 to 25 mm
Resolution	from 0.04 μ m
Measuring rate	Up to 5 kHz

NEW



optoNCDT Smart laser sensors

Powerful sensor portfolio for serial integration in automation and machine building

- Compact sensors with integrated controller
- Advanced Surface Compensation for fast adaption to changing surfaces
- Highest immunity to ambient light
- Red laser and patented Blue Laser Technology
- Analog and digital outputs

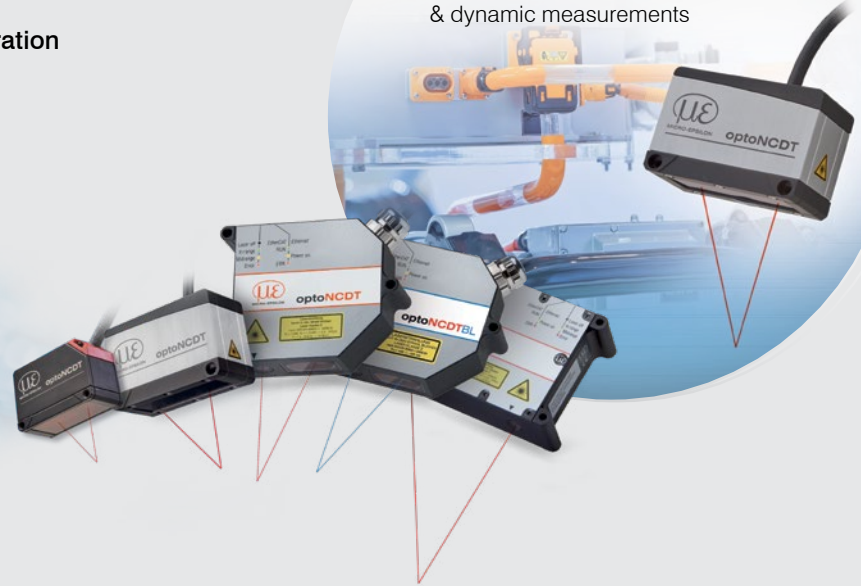
Measuring range	2 to 1000 mm
Resolution	from 0.5 μm
Measuring rate	Up to 49 kHz

EtherCAT

NEW: Now with integrated EtherCAT

optoNCDT 1900

Innovative laser sensor for precise & dynamic measurements



confocalDT Confocal sensors with highest precision

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
- Ease of use via web browser
- Single- and two-channel controllers
- Wide range of sensors for numerous applications
- Cutting-edge technology: fastest controller, largest tilt angle & smallest light spot

Measuring range	0.1 to 30 mm
Resolution	from 3 nm
Measuring rate	Up to 70 kHz



confocalDT IFS2407-3

Confocal chromatic sensor with large tilt angle



interferoMETER Ultra-precise white light interferometers

Industrial distance & thickness measurements with subnanometer resolution

- Absolute distance measurement and multi-peak distance measurement
- Distance-independent thickness measurement & multi-layer thickness measurement
- Highest resolution and linearity
- Highest signal stability due to new evaluation algorithms and active temperature compensation
- Simple parameterization via web interface
- Industry optimized sensors with robust metal housing and flexible cables

Measuring range	2.1 mm (absolute)
Resolution	< 30 pm
Measuring rate	Up to 6 kHz



Resolution < 30 pm

NEW

Multi-peak distance and thickness measurements



Modifications reserved / Y97161692-AQ22042GKE