MICRO-EPSILON

More Precision

optoNCDT 1320-200 // Compact Laser Triangulation Displacement Sensor

Compact Laser Triangulation Displacement Sensor

optoNCDT 1320-200

- Ideal for serial and OEM applications
- Compact design with integrated controller
- Measuring rate up to 2kHz
- Analog and digital output
- Trigger input and teach-in
- Plug & Play via select button
- ATC — Auto Target Compensation

The optoNCDT 1320-200 is a new laser triangulation sensor with compact size. This series provides the ideal entry-level sensor for precise measurement of displacement, distance and position. This series measures displacement, distance and position. The controller is integrated in the housing which considerably simplifies the installation procedure.

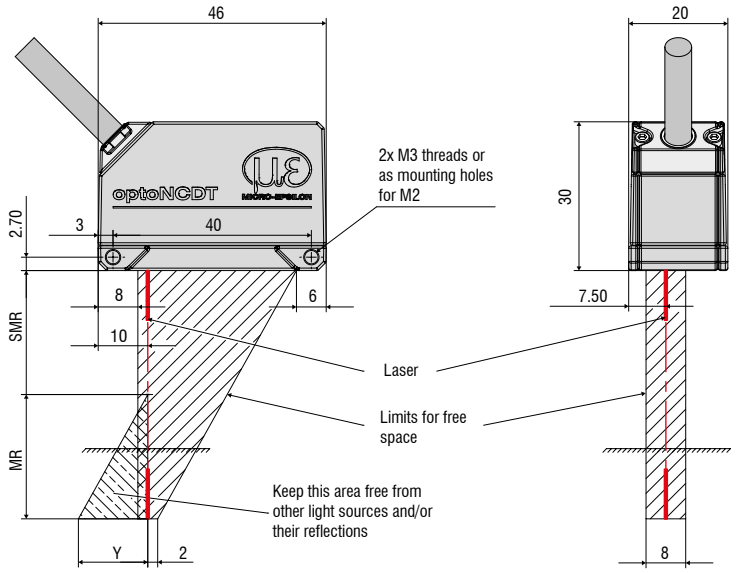
Due to its extremely compact size, the sensor can also be integrated into restricted installation space. Due to its low weight, the optoNCDT 1320-200 is ideally suitable for applications where high accelerations occur e.g. on the robot arm or in pick-and-place machines.

The optoNCDT 1320-200 offers high accuracy and adjustable measuring rates up to 2kHz.

The Auto Target Compensation (ATC) provides stable distance signal control regardless of target color or brightness. Very small objects can be detected reliably due to the small and sharply projected measurement spot size.

Plug & Play due to unique ease of use

The optoNCDT 1320-200 enables quick sensor commissioning using the multifunction sensor button. An intuitive web interface enables the user to carry out extended sensor settings.



MR	SMR	Y
200	60	70

Model		ILD1320-200
Measuring range		200mm
Start of measuring range	SMR	60mm
Midrange	MMR	160mm
End of measuring range	EMR	260mm
Linearity [1]		240µm
		0.12% FSO
Repeatability [2]		20µm
Measuring rate [3]		0.25kHz / 0.5kHz / 1kHz / 2kHz
Light source		Semiconductor laser <1 mW, 670nm (red)
Permissable ambient light		10,000 lx
Spot diameter ±10%		750 x 1100µm
Protection class		IP65
Laser safety class		Class 2 according to DIN EN 60825-1 : 2008-05
Temperature stability		±0.03% FSO/°C
Operation temperature		0 ... +50 C (non-condensing)
Storage temperature		-20 ... +70°C (non-condensing)
Control inputs/outputs		1x HTL Laser on/off; 1 x HTL Multifunction input Trigger in / zero setting / mastering / teach (1x error output npn, pnp, push pull)
Measurment value output	analog	4 ... 20 mA (1-5 V with cable PCF1420-3/U); 12 bit; freely scalable within the measuring range [4]
	digital	RS422 / 16bit
Vibration		20g / 20 ... 500Hz (nach IEC 60068-2-6)
Shock		15 g / 6 ms / 3 Achsen (nach IEC 60068-2-29)
Weight	without cable	approx. 30g
	with 3m cable	approx. 145g
Displays		2 x 3 color LEDs for power and status
Operation	button	Select button for zero / teach / factory settings
	web interface	peak selection, video signal; freely selectable averaging possibilities; data reduction; setup management [5]
Power supply		11-30V DC, 24V P< 2W
Sensor cable		3m integrated, open ends
Electronics		integrated signal processor
Electromagnetic compatibility (EMC)		EN 61 000-6-3 / DIN EN 61326-1 (Class B) EN 61 000-6-2 / DIN EN 61326-1

FSO = Full Scale Output; The specified data apply to a white, diffuse reflecting surface (reference: ceramics)
SMR = start of measuring range; MMR = midrange; EMR = end of measuring range
[1] Values apply from 0 - 50% FSO or 50 - 100% FSO; [2] Measuring rate: 2kHz, median 9;
[3] Factory setting 2kHz; modifying the factory settings requires the IF2001/USB converter (optionally available)
[4] The d/a conversion is executed with 12 Bit; [5] Connection to PC via IF2001/USB (optionally available)

High performance sensors made by Micro-Epsilon

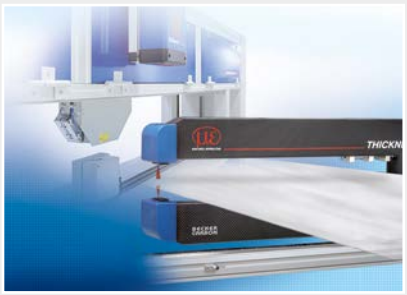
Sensors and systems for displacement and position

Sensors and measurement devices for non-contact temperature measurement

2D/3D profile sensors (laser scanner)

Optical micrometers, fiber optic sensors and fiber optics

Color recognition sensors, LED analyzers and color online spectrometer



Measurement and inspection systems

MICRO-EPSILON

MICRO-EPSILON Headquarters
Koenigbacher Str. 15 · 94496 Ortenburg / Germany
Tel. +49 (0) 8542 / 168-0 · Fax +49 (0) 8542 / 168-90
info@micro-epsilon.com · **www.micro-epsilon.com**