

More Precision



optoNCDT 1300 Low-Cost CMOS-Sensors

The miniature optoNCDT 1300 is a compact, low cost sensor for standard applications. Due to its very small construction, integration into restricted areas is possible. The optoNCDT 1300 Series has an analogue output. Due to its compact design, the sensor is ideally suited for integration into machines and automation applications.

Model		ILD1300-20	ILD1300-50	ILD1300-100	ILD1300-200
Measuring range		20 mm	50 mm	100 mm	200 mm
Start of measuring range	SMR	30 mm	45 mm	50 mm	60 mm
Midrange	MMR	40 mm	70 mm	100 mm	160 mm
End of measuring range	EMR	50 mm	95 mm	150 mm	260 mm
Linearity		40 μm	100 μm	200 μm	400 μm
		$\leq \pm 0.2\%$ FSO typically			
Resolution	static*	4 μm	10 μm	25 μm	50 μm
	dynamic	10 μm	25 μm	100 μm	200 μm
Measuring rate		500 Hz			
Light source		semiconductor laser <1 mW, 670 nm (red)			
Laser safety class		class 2 IEC 60825-1 : 2001-11			
Spot diameter	MMR	335 μm	110 μm	130 μm	2200 μm
Protection class		IP 67			
Shock		15 g / 6 ms (IEC 68-2-29)			
Vibration		2 g / 20 Hz... 500 Hz (IEC 68-2-6)			
Weight		appr. 100 g (without cable)			
Temperature stability		0.03 % FSO/ $^{\circ}\text{C}$		0.08 % FSO/ $^{\circ}\text{C}$	
Operation temperature		0...+55 $^{\circ}\text{C}$			
Storage temperature		-20...+70 $^{\circ}\text{C}$			
Output		4 ... 20 mA (1 ... 5 V with cable PC 1401-3/U)			
Supply		11...30 VDC			
Electronics		integrated signal processor			
Electromagnetic compatibility (EMC)		EN 61000-6-3			
		EN 61000-6-2			

FSO = Full scale output All specifications apply for a diffusely reflecting matt white ceramic target
*with averaging factor 32

SMR = Start of measuring range MMR = Midrange EMR = End of measuring range

