

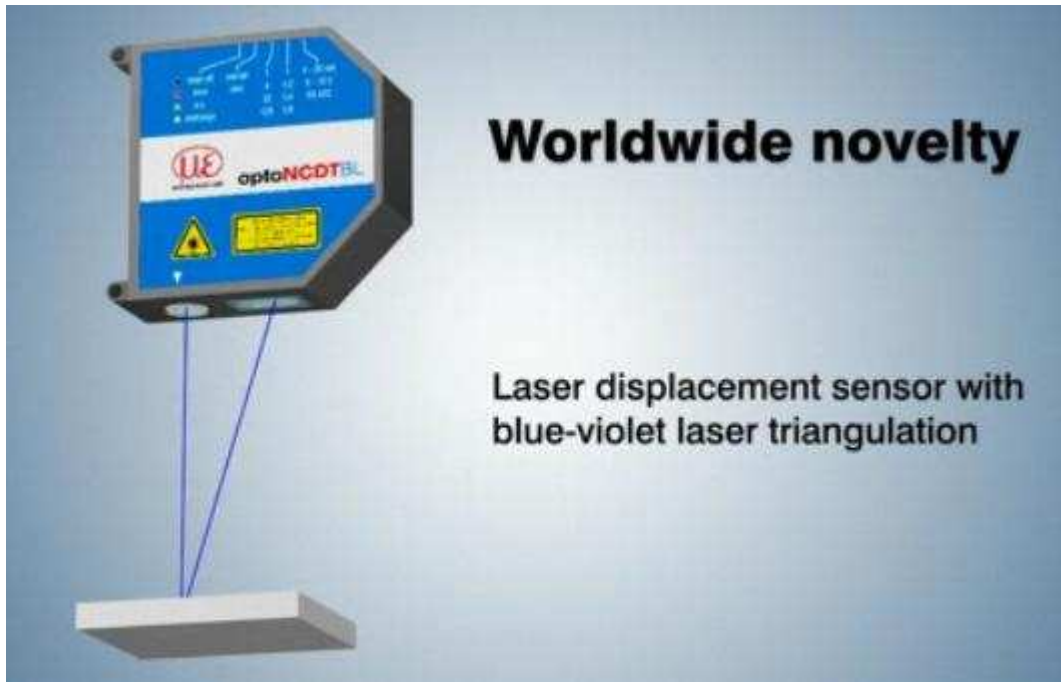











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**optoNCDT 1700BL**  
BLUE LASER triangulation sensor

# Revolutionary Ultra Blue Laser 405nm

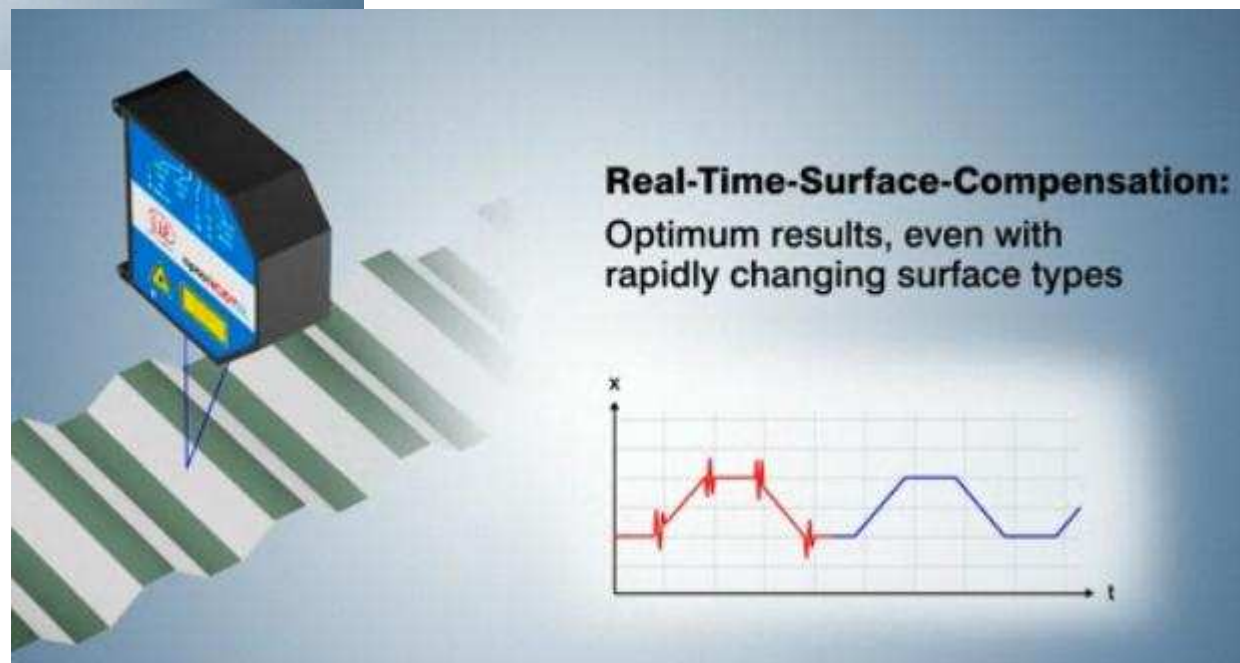
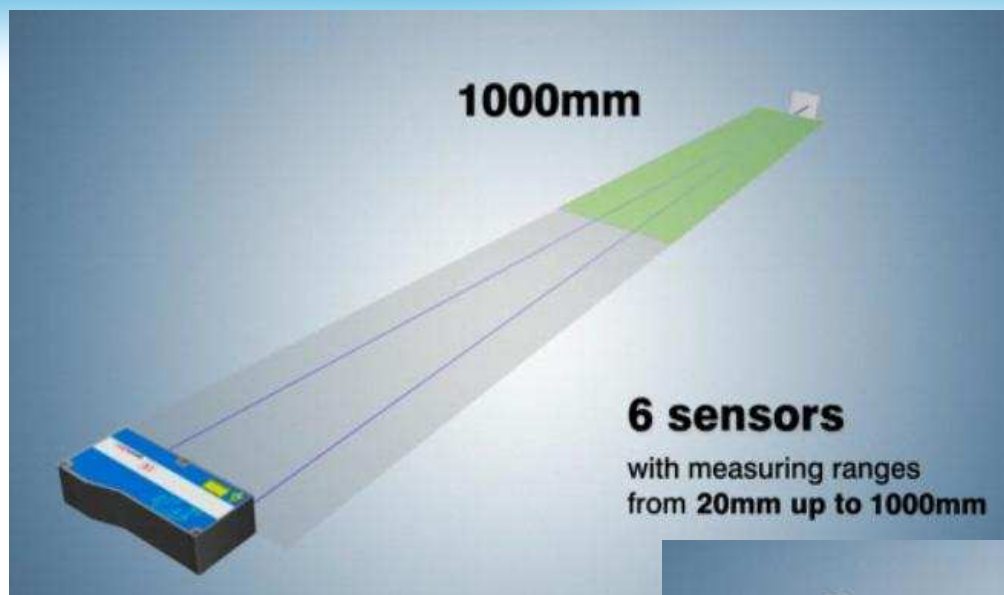


	Six models with measuring ranges from 20 to 1000mm
	Blue Laser Technology (Blue violet laser diode 405nm)
	Compact design with integrated controller
	Real Time Surface Compensation
	Adjustable measuring rate up to 2.5kHz
	Analogue (U/I) and digital output
	Adjustable filter functions (firmware)
	High flex cables for dragchain or robot use
	Calibration certificate included

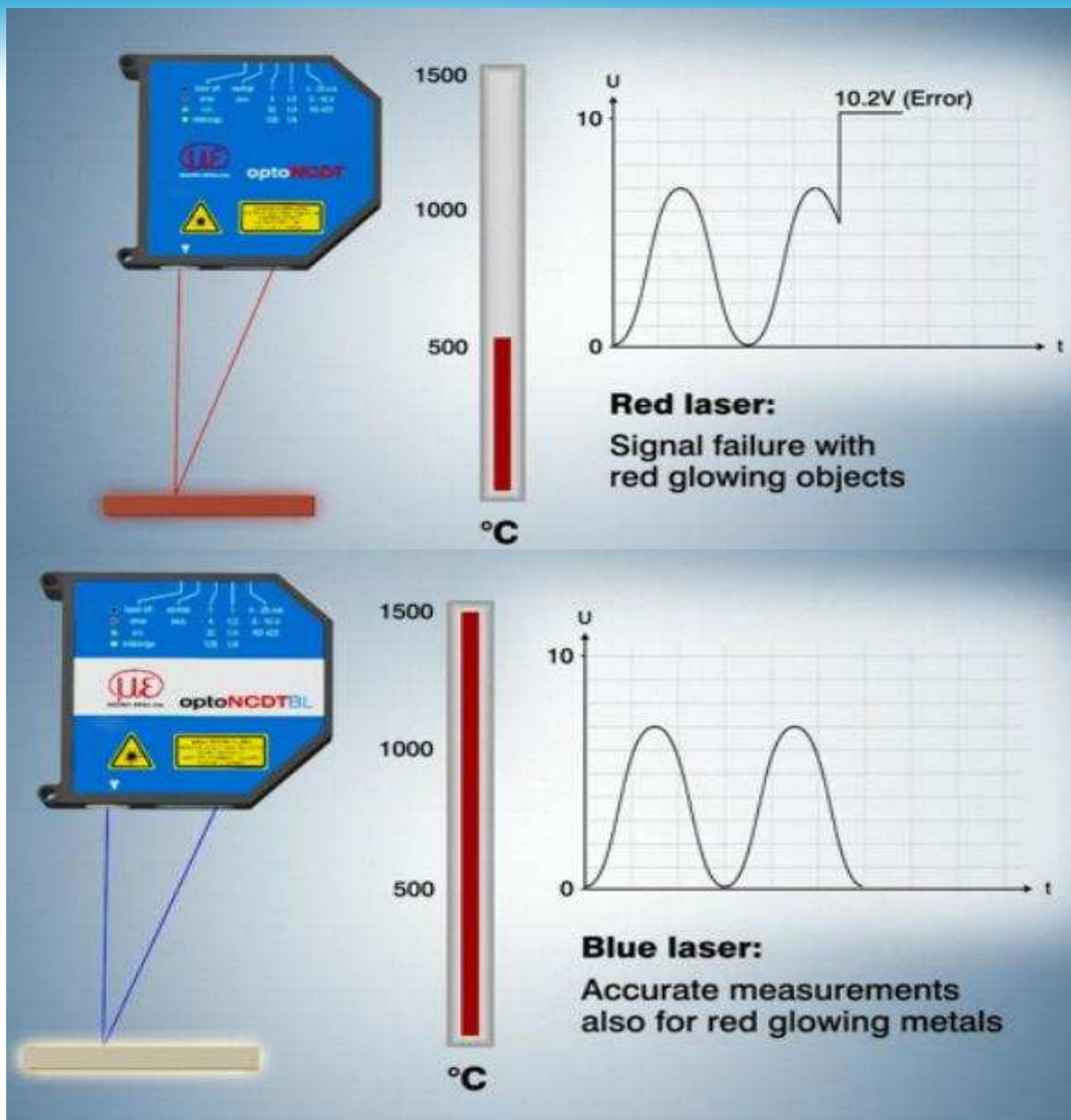
- Blue-light triangulation laser for measurement on glowing hot surfaces (3200F)
- Minimizes laser spot penetration on organic materials
- Compact sensor, with integrated electronics



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# Hot targets up to 3200F (1600C) even red glowing





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2011/02/25 08:10

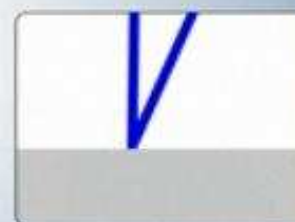
# Minimum target penetration



**Red laser light penetrates the target surface**



**No penetration using blue laser technology**



# Technical Specifications



Model		ILD 1700-20BL	ILD 1700-200BL	ILD 1700-500BL	ILD 1700-750BL	ILD 1710-50BL	ILD 1710-1000BL
<b>Measuring range</b>		20mm	200mm	500mm	750mm	50mm	1000mm
<b>Start of measuring range</b>		40mm	100mm	200mm	200mm	550mm	1000mm
<b>Midrange</b>		50mm	200mm	450mm	575mm	575mm	1500mm
<b>End of measuring range</b>		60mm	300mm	700mm	950mm	600mm	2000mm
<b>Linearity</b>		16μm ≤ ±0.08% FSO	200μm ≤ ±0.1% FSO	400μm ≤ ±0.08% FSO	750μm ≤ ±0.1% FSO	50μm ≤ ±0.1% FSO	±1mm ≤ ±0.1% FSO
<b>Resolution (at 2.5kHz without averaging)</b>		1,5μm	12μm	30μm	50μm	5μm	100μm
<b>Measuring rate</b>		2.5kHz / 1.25kHz / 625Hz / 312.5Hz (adjustable)					
<b>Light source</b>		semiconductor laser < 1 mW, 405nm (blue violet)					
<b>Permissible ambient light (at 2.5 kHz)</b>		10,000 lx					
<b>Laser safety class</b>		class 2 IEC 60825-1 : 2008-05					
<b>Spot diameter</b>	SMR	320μm	1300μm	1500μm	1500μm	400x500μm	2.5...5mm
	MMR	45μm	1300μm	1500μm	1500μm	400x500μm	2.5...5mm
	EMR	320μm	1300μm	1500μm	1500μm	400x500μm	2.5...5mm
<b>Temperature stability*</b>		0.01% FSO/°C					
<b>Operation temperature</b>		0 ... +50 °C					
<b>Storage temperature</b>		-20 ... +70 °C					
<b>Output</b>	measurements	selectable: 4 ... 20 mA / 0 ... 10 V / RS 422 / USB (option with cable PC1700-3/USB)					
	switching outputs	1 x error or 2 x limit (each programmable)					
<b>Switch input</b>		Laser ON-OFF / Zero					
<b>Operation</b>		via touch screen on sensor or via PC with ILD 1700 tool					
<b>Power supply</b>		24 VDC (11 ... 30 VDC), max. 150 mA					
<b>Sensor cable length (with connector)</b>		standard 0.25m integrated / optional: extension 3m or 10m					
<b>Synchronisation</b>		possible for simultaneous or alternating measurements					
<b>Protection class</b>		IP 65					
<b>Vibration</b>		2 g / 20 ... 500 Hz					
<b>Shock</b>		15 g / 6 ms					
<b>Weight (with 25cm cable)</b>		~ 550g	~ 550g	~ 600g	~ 600g	~ 800g	~ 800g



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