



# More Precision

**scanCONTROL 25xx** // Laser scanner for industrial series applications





- Ideal for industrial series applications in production line & automation
- Compact and lightweight design without external controller
- Easy integration with diverse interfaces
- Simple software integration
- High signal stability

#### Sensor for series applications

scanCONTROL 25xx laser scanners are designed for industrial measurement tasks. The combination of compact design, versatility and signal stability enables an excellent price/performance ratio, especially for measurement tasks involving large quantities.

#### COMPACT and SMART performance classes for automation

The COMPACT sensors (scanCONTROL 2500) are integrated in the customer software to transmit the raw profiles. Therefore, numerous libraries including detailed documentation are available. In addition, direct integration into industrial image processing systems is possible since the sensors operate according to the international GigE Vision standard which enables individual integration of the scanners.

The SMART sensors (scanCONTROL 2510) are parameterized via the scanCONTROL Configuration Tools software and deliver direct measurement results without requiring any additional computer or controller. The sensor autonomously executes up to 4 measuring programs in parallel while delivering 4 measurement results per profile.

The scanCONTROL 2510 scanners are suitable for versatile profile measurement tasks. They measure and evaluate angles, steps, gaps, distances, extreme values and many more.

#### Comprehensive accessories for numerous measurement tasks

With three measuring ranges and comprehensive accessories including protective housings, cable types and interface converters, the scanCONTROL 25xx models are ideal for series integration in production lines and machine building.

#### Article designation

LLT	25	00	-25
			<b>Measuring range</b> 25 mm 50 mm 100 mm
			<b>Class</b> 00=COMPACT 10=SMART
			<b>Series</b> LLT25xx

No options available for scanCONTROL 25xx.



Model		LLT25xx-25	LLT25xx-50	LLT25xx-100	
Z-axis	Standard measuring range	Start of measuring range	53.5 mm	70 mm	190 mm
		Mid of measuring range	66 mm	95 mm	240 mm
		End of measuring range	78.5 mm	120 mm	290 mm
		Height of measuring range	25 mm	50 mm	100 mm
	Extended measuring range	Start of measuring range	53 mm	65 mm	125 mm
		End of measuring range	79 mm	125 mm	390 mm
	Linearity <sup>1)</sup>	(2 sigma)	±0.10 % FSO	±0.10 % FSO	±0.13 % FSO
Reference resolution <sup>2) 3)</sup>		2 μm	4 μm	12 μm	
X-axis	Standard measuring range	Start of measuring range	23.4 mm	42 mm	83.1 mm
		Mid of measuring range	25 mm	50 mm	100 mm
		End of measuring range	29.1 mm	58 mm	120.8 mm
	Extended measuring range	Start of measuring range	23.2 mm	40 mm	58.5 mm
		End of measuring range	29.3 mm	60 mm	143.5 mm
Resolution (x-axis)		640 points/profile			
Profile frequency		up to 300 Hz			
Interfaces	Ethernet GigE Vision		Output of measurement values Sensor control Profile data transmission		
	Multi-function port	Digital inputs	Mode switching Encoder (counter) Trigger		
		RS422 (half-duplex) <sup>4)</sup>	Output of measurement values Sensor control Trigger Synchronization		
Output of measurement values		Ethernet (UDP / Modbus TCP); RS422 (ASCII / Modbus RTU) analog <sup>5)</sup> ; switch signal <sup>5)</sup> PROFINET <sup>6)</sup> ; EtherCAT <sup>6)</sup> ; EtherNet/IP <sup>6)</sup>			
Display (LED)		1x laser ON/OFF, 1x power/error/status			
Light source		Semiconductor laser 658 nm (red)			
Aperture angle of laser line		20°	25°	25°	
Laser power		≤ 8 mW (laser class 2M)			
Laser switch-off		via software			
Permissible ambient light (fluorescent light) <sup>2)</sup>		10,000 lx			
Protection class (sensor)		IP65			
EMC requirements		according to: EN 61326-1: 2006-10 DIN EN 55011: 2007-11 (group 1, B class) EN 61000-6-2: 2006-03			
Vibration		2 g / 20 ... 500 Hz			
Shock		15 g / 6 ms			
Operating temperature		0 ... +45 °C			
Storage temperature		-20 ... +70 °C			
Dimensions		96 x 85 x 33 mm			
Sensor weight (without cable)		380 g			
Supply		11 ... 30 VDC, nominal value 24 V, 500 mA, IEEE 802.3af class 2, Power over Ethernet			

<sup>1)</sup> Measuring range (standard)

<sup>2)</sup> Measurement object: Micro-Epsilon standard object (metallic, diffusely reflecting material)

<sup>3)</sup> According to a one-time averaging across the measuring field (640 points)

<sup>4)</sup> RS422 interface, programmable either as serial interface or as input for triggering/synchronization

<sup>5)</sup> Only with Output Unit

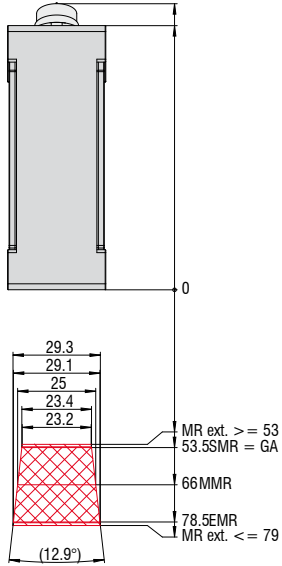
<sup>6)</sup> Only with scanCONTROL Gateway

FSO = Full Scale Output

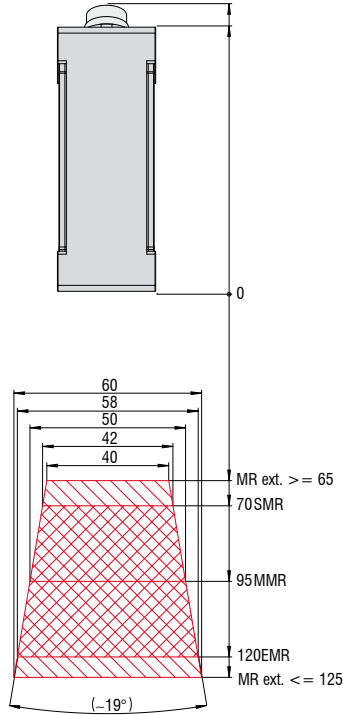
Dimensions and measuring ranges:

 standard range  
 extended range

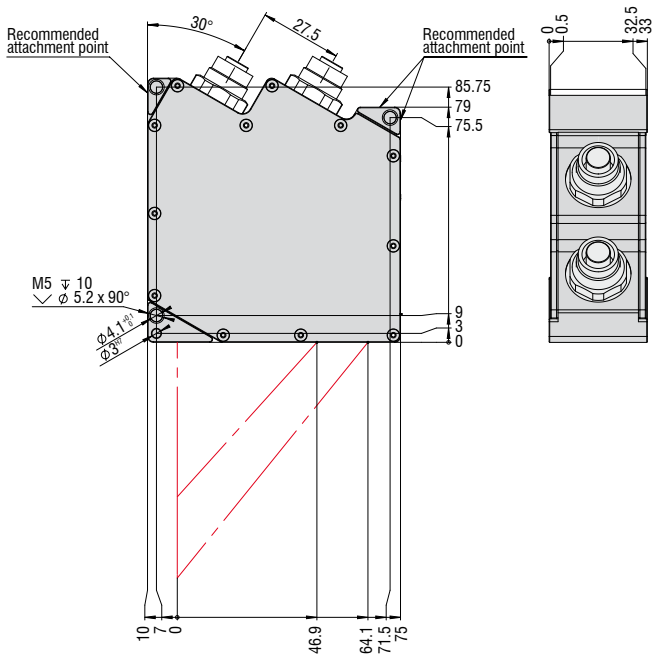
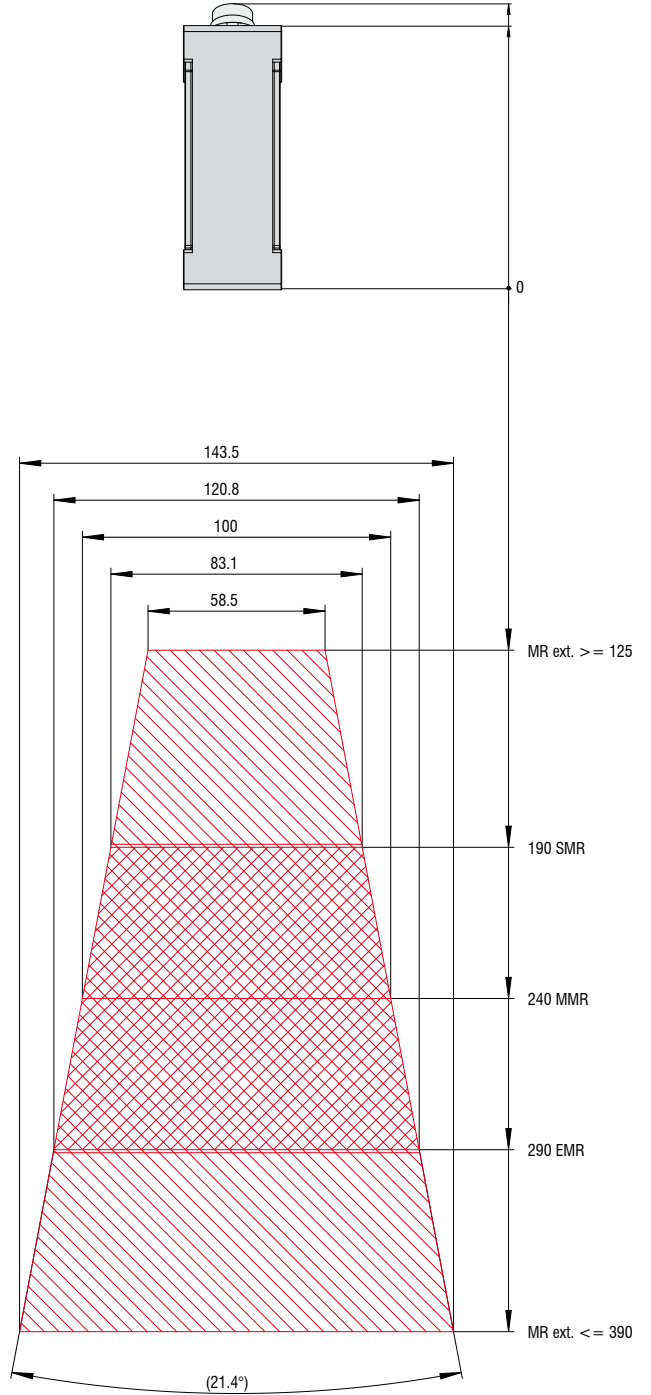
LLT25xx-25



LLT25xx-50



LLT25xx-100



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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