



SCIGATE AUTOMATION (S) PTE LTD

Bukit Batok Street 22 #01-01 Singapore 659592

Tel: (65) 6561 0488

Fax: (65) 6561 0588

Email: sales@scigate.com.sg

Web: <https://scigate.com.sg/>

Business Hours: Monday - Friday 8:30AM - 6:15PM

More Precision

scanCONTROL // 2D/3D laser scanners (laser profile sensors)





- Ideal for industrial series applications in production line & automation
- Resolution (x-axis) up to 640 points
- High reference resolution for the detection of finest details
- 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
Measuring range			
25 mm			
50 mm			
100 mm			
Class			
00=COMPACT			
10=SMART			
Series			
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
	Extended measuring range	Height of measuring range	25 mm	50 mm	100 mm
		Start of measuring range	53 mm	65 mm	125 mm
		End of measuring range	79 mm	125 mm	390 mm
	Linearity ¹⁾ (2 sigma)		±0.10 % FSO	±0.10 % FSO	±0.13 % FSO
Reference resolution ^{2) 3)}		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) ⁴⁾	Output of measurement values Sensor control Trigger Synchronization		
Output of measurement values			Ethernet (UDP / Modbus TCP); RS422 (ASCII / Modbus RTU) analog ⁵⁾ ; switch signal ⁵⁾ PROFINET ⁶⁾ ; EtherCAT ⁶⁾ ; EtherNet/IP ⁶⁾		
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) ²⁾			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		

¹⁾ Measuring range (standard)

²⁾ Measurement object: Micro-Epsilon standard object (metallic, diffusely reflecting material)

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

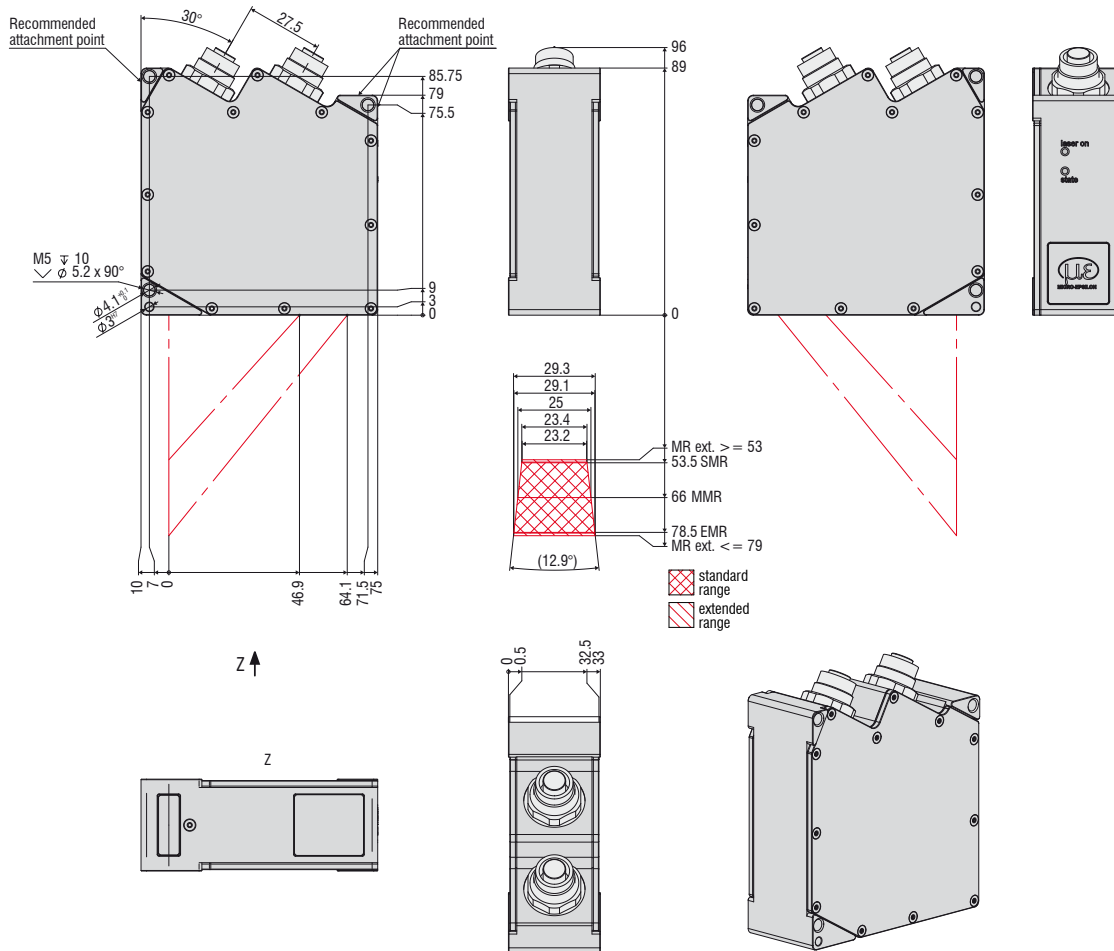
⁴⁾ RS422 interface, programmable either as serial interface or as input for triggering/synchronization

⁵⁾ Only with Output Unit

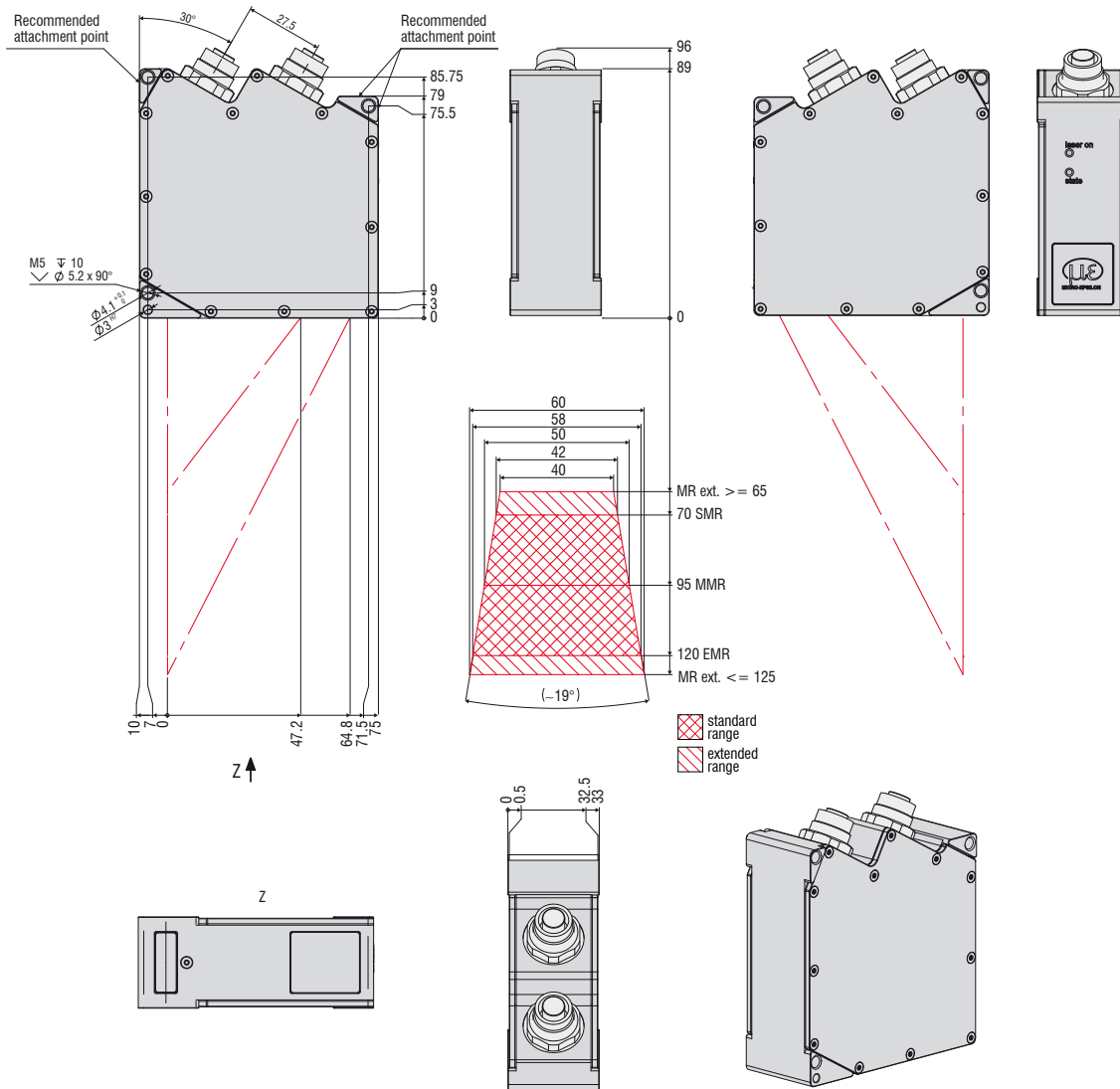
⁶⁾ Only with scanCONTROL Gateway

FSO = Full Scale Output

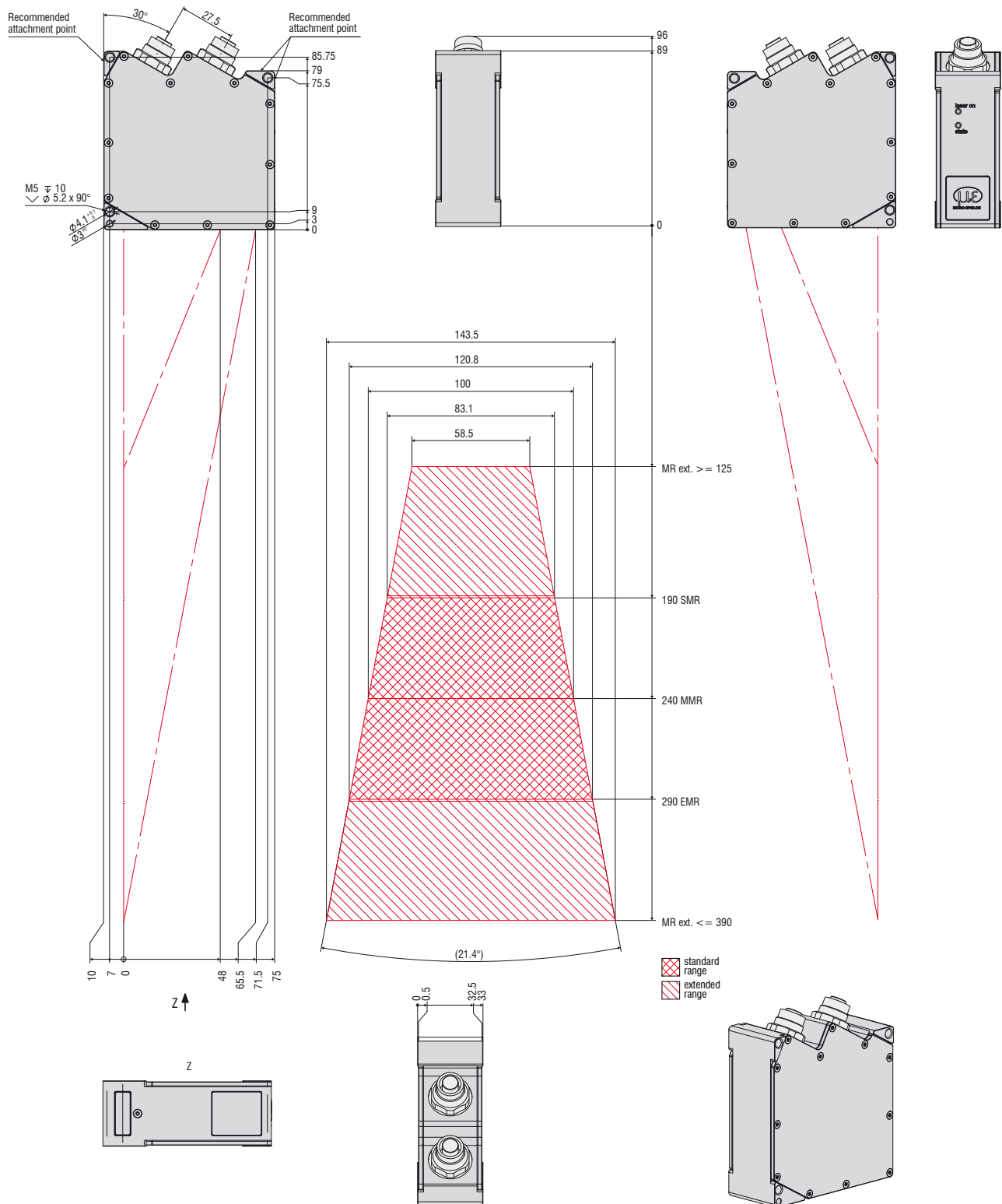
LLT25x0/LLT26x0/29x0-25



LLT25x0/LLT26x0/29x0-50



LLT25x0/LLT26x0/29x0-100



Sensors and Systems from Micro-Epsilon



Sensors and systems for displacement, distance and position



Sensors and measurement devices for non-contact temperature measurement



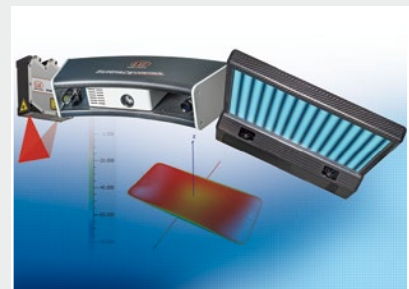
Measuring and inspection systems for metal strips, plastics and rubber



Optical micrometers and fiber optics, measuring and test amplifiers



Color recognition sensors, LED analyzers and inline color spectrometers



3D measurement technology for dimensional testing and surface inspection