

Typical field of view <sup>1</sup> near   mid   far	118   130   142 mm	295   310   328 mm
Measurement range <sup>1</sup>	60 mm	140 mm
Stand-off distance	160 mm	500 mm
Typical vertical resolution (Z) <sup>1</sup>	6.5 - 9 µm	46 - 56 µm
Typical lateral resolution (Y) <sup>1</sup>	92 - 110 µm	225 - 310µm
Z-Linearity <sup>2,5</sup>	0.008% (4.8 µm/mm)	0.025% (35 µm/mm)
Z-Repeatability <sup>4,5</sup>	1.4 µm	6 µm
Weight	Approx. 1900 g	Approx. 1900 g
Part number (laser class 2M   3B)	3.003.001   3.003.002	3.003.025   3.003.026

Maximum points / 3D profile	1272
Typical scan rate <sup>3</sup>	Approx. from 2.5 kHz up to 25 kHz
Typical 3D point rate <sup>3</sup>	Approx. from 3.2 up to 32 million points/sec
Interface	Gigabit Ethernet (1 Gbit/sec)
Inputs	4 x Inputs, 5 - 24 VDC Quadrature Encoder (AB-Channel, RS-422 standard)
Outputs	2 x Outputs, 24 VDC (max. 20 mA)
Trigger	START Trigger support on Input 1 DATA Trigger support on Quadrature Encoder Input (Max. DATA trigger rate: 100 kHz) DATA Trigger support on Input 2, 3 (Max. DATA trigger rate: 10 kHz)
Input voltage   Power	24 VDC, ± 15% ripple   13 W
Laser wavelength	660 nm
Laser class standard   optional	2M   3B
Maximum ambient light	10,000 lx
EMC test	as per EN 61 000-6-2, EN 61 000-6-4
Vibration / Shock test	as per EN 60 068-2-6, -27, -29, -64
Electrical safety	as per EN 61 010-1-3
Protection class	III, as per EN 61 040-3
Enclosure rating	IP65
Air humidity	Maximum 90%, non-condensing
Temperature operation   storage	0 - 40° C   -20 - 70° C
Compatible accessories	Power-I/O cable: 6.310.OXX Ethernet cable: 6.302.OXX Encoder cable: 6.307.OXX

1 Typical values can vary up to 5% due to optical tolerances  
 2 Z-Linearity calculated as variation of "bias" (reference value vs. measured value) over the measurement range. The %slope of a best-fit line from a plot of bias over measurement range represents Z-Linearity  
 3 Scan rate & point rate are dependent on the configured field of view, measurement range and exposure time. The typical scan/point rate has been estimated with an exposure time of 1 µsec  
 4 Experimentally assessed by scanning a measurement target moving over a conveyor belt 50 times. Measurement performed by averaging height values within the Z-Map image. No post-processing filters applied  
 5 Measurements performed on a SmartRay standard artifact which is an aluminum flat surface painted matte white

