

Typical field of view ¹ near mid far	26.5 27 27.5 mm
Measurement range ¹	4 mm
Stand-off distance	85 mm
Typical vertical resolution (Z) ¹	2.1 - 2.2
Typical lateral resolution (Y) ¹	25 - 26 µm
Z-Linearity ^{2,5}	0.03% (1.2 µm/mm)
Z-Repeatability ^{4,5}	0.6 µm
Weight	Approx. 2300 g
Part number	3.003.030

Maximum points / 3D profile	1272
Typical scan rate ³	Approx. from 4 kHz up to 25 kHz
Typical 3D point rate ³	Approx. from 5 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	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 10% 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 3 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

