

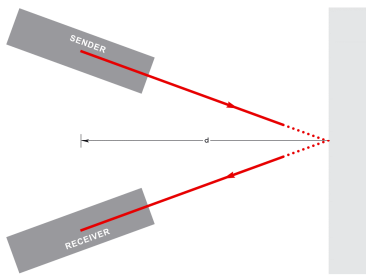


Technical Data LARA 6000



The spot 1D Laser Measurement System LARA, developed by Z+F, is the basis for different applications.

Laser measurement system	
Ambiguity interval:	79 m
Min. range:	0.4 m
Range Resolution:	0.1 mm
Data acquisition rate:	≤ 500 000 pixel/sec.
Linearity error up to 50 m ¹ :	≤ 1 mm
Range noise at 10 m: ^{1 2}	
> Reflectivity 10% (black):	1.2 mm rms
> Reflectivity 20% (dark grey):	0.7 mm rms
> Reflectivity 100% (white):	0.4 mm rms
Range noise at 25 m: ^{1 2}	
> Reflectivity 10% (black):	3.0 mm rms
> Reflectivity 20% (dark grey):	2.0 mm rms
> Reflectivity 100% (white):	1.0 mm rms
Range noise at 50 m: ^{1 2 3}	
> Reflectivity 10% (black):	7.5 mm rms
> Reflectivity 20% (dark grey):	4.0 mm rms
> Reflectivity 100% (white):	2.5 mm rms
Range drift over temp. (0 °C – 40 °C):	< 2 mm
Optical transceiver	
Laser output power (CW):	19/29 mW
Laser wavelength:	780 nm
Beam divergence:	0.22 mrad
Beam diameter at 1 m distance:	3 mm kreisrund
Laser safety class:	3B* (ISO EN 60825-1)
Miscellaneous	
Calibrated temperature:	0 °C – 40 °C
Storage temperature:	-20 °C – 40 °C
Humidity:	non-condensing
Target reflectivity:	no retro-reflectors
Illumination	all conditions from darkness to daylight



¹ detailed explanation on demand – please contact imager5006@zf-laser.com

² data acquisition rate: 127 000 pxl/sec., raw data, in High Power Mode

³ values extrapolated

Caution: Class 3B laser device. Appropriate safety measures (safety glasses, etc.) according national accident prevention regulations need to be followed.