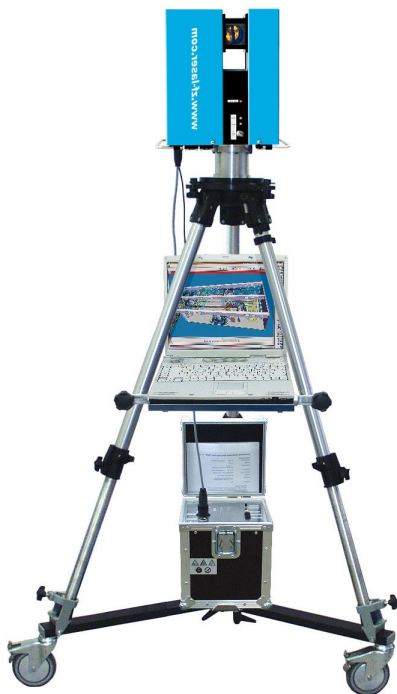




Technical Data Z+F IMAGER[®] 5003



The imaging 3D laser measurement systems are applicable in the fields of digital planning of factories, industrial plants, architecture, protection of historic monuments, landscape and virtual reality. They are based upon the spot Z+F Laser Measurement System LARA.

Laser measurement system

Ambiguity interval:	53.5 m
Min. range:	1.0 m
Resolution Range 16 Bit:	1.0 mm/lb
Max. Data acquisition rate:	≤ 500,000 pixel/sec.
Typical data acquisition rate:	125,000 pixel/sec.
Linearity error: ¹	≤ 5 mm
Range noise at 10 m: ^{1,2}	
> Reflectivity 20% (dark grey):	≤ 3.0 mm rms
> Reflectivity 100% (white):	≤ 1.3 mm rms
Range noise at 25 m: ^{1,2}	
> Reflectivity 20% (dark grey):	≤ 9.0 mm rms
> Reflectivity 100% (white):	≤ 3.0 mm rms
Range drift over temp. (0–40°C):	negligible due to internal reference

Optical transceiver

Laser output power (CW):	23 mW (rot)
Beam divergence:	0.22 mrad
Beam diameter at 1 m distance:	3 mm kreisrund
Laser safety class:	3R (ISO EN 60825-1)

Deflection unit

Field of view vertical:	310°
Field of view horizontal:	360°
Resolution vertical:	0.018°
Resolution horizontal:	0.01°
Accuracy vertical: ¹	0.02° rms
Accuracy horizontal: ¹	0.02° rms
Max. scanning speed vertical:	2,000 rpm
Typ. scanning speed vertical: ²	1,500 rpm
Scanning time: (image field of view total at middle resolution): ²	100 sec.

Miscellaneous

Data interface:	
> Max. output data rate:	5 MB/sec.
> Host interface:	IEEE1394 ("Firewire"/"I-Link")
Power supply:	
> Input voltage:	24V DC (scanner) 90–260V AC (power unit)
Power consumption (total):	50-70W
Ambient conditions:	
> Calibrated temperature range:	0–40°C
> Humidity:	non-condensing
> Target reflectivity:	no retro-reflectors
> Illumination:	all conditions from darkness to daylight

Dimensions and weights

Scanner (w x d x h):	30 x 18 x 50 cm
Weight:	16 kg
Stativ:	
> Height:	ca. 80-140 cm
> Diameter:	ca. 120 cm
> Weight:	9kg

1) DETAILIERTE ERLÄUTERUNG AUF ANFRAGE – BITTE KONTAKTIEREN SIE INFO@ZF-LASER.COM 2) DATENRATE: 125 000 PIXEL/SEK.