



# Datasheet

## SLK25

VIVID technology CMM laser scanner



### TECHNICAL DATA | Performance

#### ACCURACY<sup>1</sup>

##### ISO 10360 -8:2013

Form	PForm.Sph.1x25:Tr:ODS,MPE	6 $\mu$ m
Dispersion	PForm.Sph.D95%:Tr:ODS,MPL	8 $\mu$ m
Size	PSize.Sph.1x25:Tr:ODS,MPE	10 $\mu$ m
Articulated location	LDia.5x25:Art:ODS,MPL	15 $\mu$ m
Cone angle		115°

#### PRODUCTIVITY

Points per second		268,800
Points per line		1,920
Resolution <sup>2</sup>	near   mid   far	12   13   14 $\mu$ m
Scan rate		140 Hz

Conformance is proven when all errors of indication lie within or on the accuracy specification limits MPE/MPL.

Conformance is unproven when one or more errors of indication lie outside the accuracy specification limits MPE/MPL.

<sup>1</sup> Accuracy specifications for CMM with an accuracy of 2  $\mu$ m +L/350 or better using manufacturer specified test sphere and empirical qualification (L = measured length in millimetres).

PForm.Sph.1x25:Tr:ODS,MPE

PForm.Sph.D95%:Tr:ODS,MPL

PSize.Sph.1x25:Tr:ODS,MPE

LDia.5x25:Art:ODS,MPL

Cone angle

Maximum probing form error using 25 representative points from data measured in translatory scanning mode.

Maximum probing dispersion value using 95% of the points measured in translatory scanning mode.

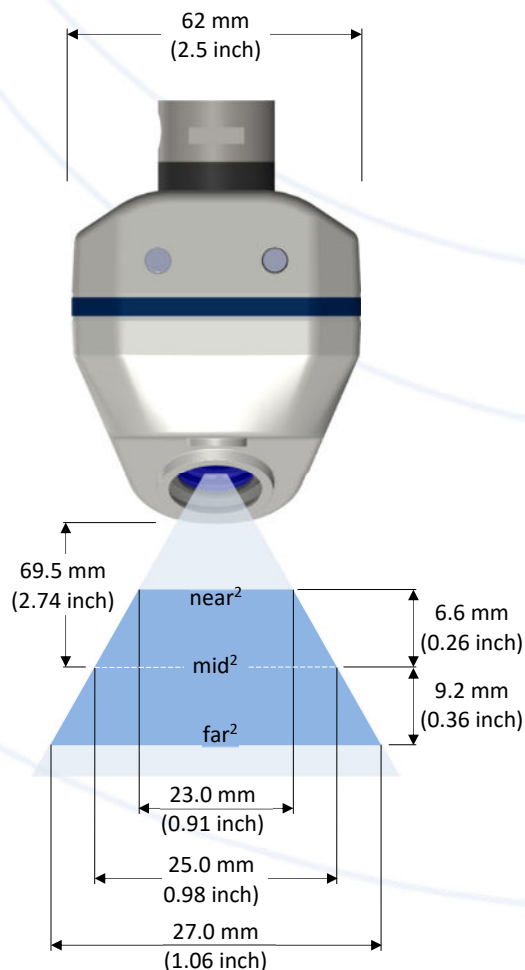
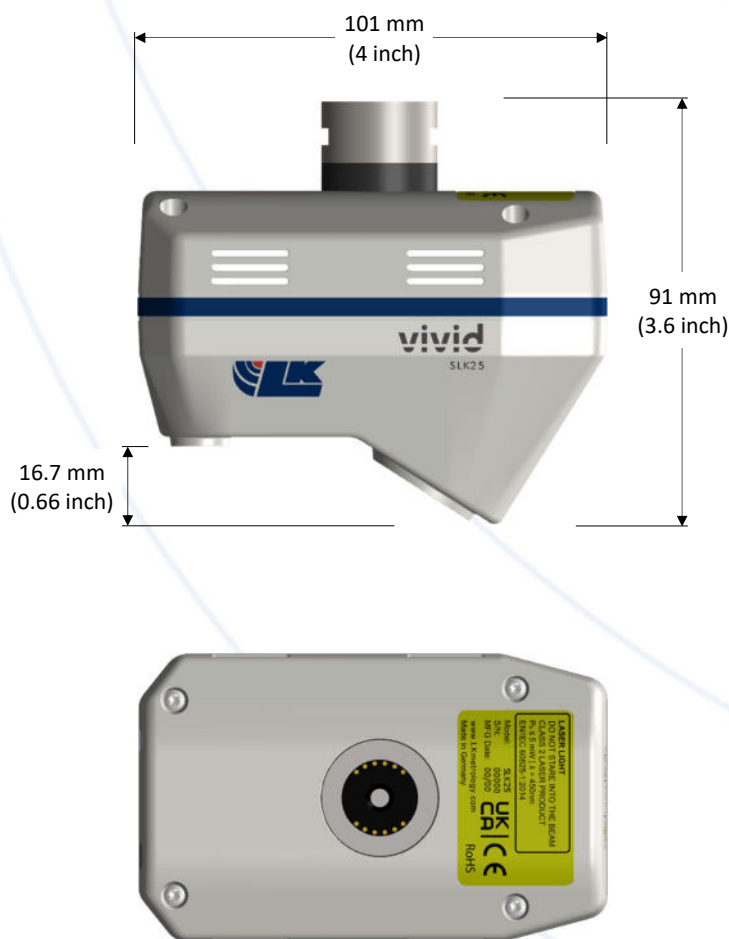
Maximum probing size error using 25 representative points from data measured in translatory scanning mode.

Maximum articulated location value using the centres of a sphere measured using five PH10 head positions in articulation mode.

Region of a sphere on which the measured points are selected.

<sup>2</sup> Typical values, may vary up to 10% due to optical tolerances.

## TECHNICAL DATA | Dimensions



<sup>2</sup> Typical values, may vary up to  $\pm 10\%$  due to optical tolerances.

## TECHNICAL DATA | Accuracy Verification

SLK25 is supplied fully traceable to the internationally recognised accuracy certification standard ISO 10360-8 for CMM laser scanners, giving users complete confidence in the reliability of their measurements.



Range of the radial distances between the centre of a measured sphere and 25 representative points.



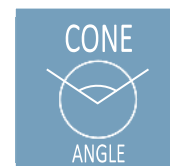
Smallest width of a spherical shell encompassing 95% of the points from a measured sphere.



Difference between the measured diameter of a sphere using 25 representative points and its calibrated diameter.



Smallest diameter of a sphere containing the centres of a sphere measured using five probe head positions.



Region of a sphere on which the measured points are selected during measurement.

## SALES PACKAGE | VIVID SLK25 CMM Laser Scanner Kit



- VIVID SLK25 CMM Laser Scanner
- Sphere Re-qualification Kit
  - Ø12 mm (0.47 inch) sphere
  - 100 mm (3.93 inch) stand
  - 60 mm (2.36 inch) stand extension
  - M10 and M8 mounting adapters
- Probe head autojoint key
- ISO 10360 Calibration Certificate
- End user licence USB key
- Microfibre lens cleaning cloth
- Storage case
  - Waterproof
  - Crushproof
  - Pad-lockable
  - Length 300 mm (11.8 inch)
  - Width 249 mm (9.8 inch)
  - Depth 119mm (4.7 inch)
- Safety Guide

## TECHNICAL DATA | Design

### TECHNICAL FEATURES

Laser class	2
Emitted wavelength	450 nm (blue)
Maximum ambient light	10,000 lx
Probe head compatibility	PH10M PLUS, PH10MQ PLUS, PHS-2
Ingress protection	IP65 (except for mounting interface)
Weight	SLK25 only: 0.25 kg [0.5 lbs]      SLK25 kit and case: 2.45 kg [5.4 lbs]


### ENVIRONMENTAL REQUIREMENTS

Metrological temperature	18 to 22°C (64.4 to 71.6°F)
Operating temperature	0°C to 40°C (32°F to 104°F)
Storage temperature	-20°C to 70°C (-4 to +158°F)
Relative humidity	Maximum 90%, non-condensing

### WARRANTY

	12 months' warranty as standard Terms and conditions apply see LK Metrology website for full details
--	---

### CONFORMITY

	Eye safety	EN/IEC 60825-1:2014
	EMC test	as per EN 61 000-6-2, EN 61 000-6-4
	Vibration/ Shock test	as per EN 60 086-2-6, -27, -29, -64
	Electrical safety	as per EN 61 010-1-3
	Protection class	III, as per EN 61 040-3