

Calibration Interferometer

SP 15000 C3 Series NG

System parameter	SP 15000 C3 NG
Length measurement:	
Measuring range	50 m
Resolution	0.1 nm
Angle measurement:	
Measuring ranges of pitch and yaw angles	±5°
Resolution	0.005 µrad*
Roll angle measurement (optional with RAS 175 W):	
Measuring range	±17,5 mrad
Resolution	0.9 µrad
Measuring uncertainty under stable conditions:	
Length measurement	±0.2 µm/m
Angle measurement	±0.04 % ± 0.04 µrad
Roll angle measurement	±2.4 µrad ±0.5% (19°C – 21°C) ±2.4 µrad ±1.5% (15°C – 25°C)
±0.xx % = proportion of the measured value M ² = Measuring distance in meters squared	
Beam distance (horizontal and vertical)	50 mm
Wavelength	632.8 nm
Frequency stability of the HeNe laser	2·10 ⁻⁸
Warm-up time of the HeNe laser	20 min
Operating temperature range	15 ... 30°C
Max. displacement speed of measuring reflector	500 mm/s
Geometric Data	
Dimensions (L x W x H):	
Sensor head with adjustable mount	[207 x 168 x 141] mm
Reflector unit	[74 x 50 x 74] mm
Electronic evaluation and supply unit EU	[450 x 450 x 150] mm
Roll angle sensor RAS 175 W (optional)	[74 x 54 x 77] mm
Mass:	
Sensor head with adjustable mount	5 kg
Reflector unit	390 g
Electronic evaluation and supply unit EU	9.4 kg
Roll angle sensor RAS 175 W (optional)	425 g
Electrical Data	
Interfaces Standard	USB
other interfaces on request (/R)	
Cable length sensor head - electronics unit	6 m, optionally up to 10 m
Power supply	100 ... 240 VAC / 47...63 Hz
Laser safety class according to EN 60825-1:2014 and ANSI Z136.1 (CDRH)	2M II

*least significant bit (LBS)

07/2024 · Subject to change.