목록

sp15000c3_	_datasheet·····	1
sp15000c3	dimension	. 2

Calibration Interferometer SP 15000 C3 Series



System parameter	SP 15000 C3		
Length measurement:			
Measuring range (on request up to 50 m)	15 m		
Resolution	<1 nm		
Angle measurement:			
Measuring ranges of pitch and yaw angles	±5°		
Resolution	0.004 μrad*		
Roll angle measurement (optional with RAS 175 W):			
Measuring range	±1°		
Resolution	0.2 arcsec		
Measuring uncertainty under stable conditions:			
Length measurement	±0.1 ppm		
Angle measurement	±0.04 % ± 0.009 arcsec		
Roll angle measurement	±0.5 arcsec ±0.5% (19°C – 21°C) ±0.5 arcsec ±1.5% (15°C – 25°C)		
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	1530°C		
Max. displacement speed of measuring reflector	500 mm/s		
Geometric Data			
Dimensions (L x W x H):			
Sensor head with adjustable mount	[192 x 192 x 122] mm		
Reflector unit	[104 x 56 x 104] mm / [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	3.4 kg		
Reflector unit	850 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	100240 VAC / 4763 Hz		
Laser safety class according to EN 60825-1:2014 and ANSI Z136.1 (CDRH)	2M II		

^{*}least significant bit (LBS)

05/2023 · Subject to change.

SP 15000 C3 (A030687)

Distance angle measurements













