

# Calibration Interferometer SP 15000 C5 Series



System parameter	SP 15000 C5	SP 15000 C5 with compact straightness
Length measurement: Measuring range (on request up to 50 m) Resolution		15 m 0.1 nm
Angle measurement: Measuring ranges of pitch and yaw angles Resolution		±5° 0.004 µrad
Straightness measurement Measuring range, lateral Resolution Axial range	±4 mm 10 nm 0.1...6.5 m	±2 mm 10 nm 0.1...6.5 m
Measuring uncertainty under stable conditions: Length measurement Angle measurement Straightness measurement		±0.1 ppm ±0.04 % ± 0.009 arcsec ±0.1 % ± 0.1·M <sup>2</sup> ± 0.1 µm
Beam distance (horizontal and vertical)		50 mm
Wavelength		632.8 nm
Frequency stability of the HeNe laser		2·10 <sup>-8</sup>
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	[192 x 192 x 122] mm	[192 x 192 x 122] mm
Reflector unit	[104 x 62 x 104] mm	[74 x 70 x 74] mm
Straightness mirror (standard)	[234 x 43 x 49] mm	[234 x 43 x 49] mm
Straightness mirror (up to 3.5 m axial range)	-	[110 x 33 x 30] mm
Electronic supply and evaluation unit	[450 x 450 x 150] mm	[450 x 450 x 150] mm
Mass:		
Sensor head with adjustable mount	3.3 kg	3.3 kg
Reflector unit	850 g	570 g
Straightness mirror	1 kg	1 kg
Electronic supply and evaluation unit	11 kg	11 kg

## Electrical Data

Interfaces	standard other interfaces on request	RS232C, USB
Cable length sensor head - electronics unit		3 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