

Double-Beam-Interferometer

SP 5000 DS

System parameter	SP 5000 DS
Measuring range	0 m to ≥ 5 m
Resolution	20 μm^*
Angular measuring ranges with reflector	$\pm 12.5^\circ$ **
with plane mirror (recommended distance ≤ 2 m)	$\pm 430 \mu\text{rad}$
Angular resolution (at 0.1 nm length resolution)	0,01 μrad^{***}
Beam distances (horizontal and vertical)	12 mm
Wavelength	632.8 nm
Frequency stability of the HeNe laser (after warm-up time)	$2 \cdot 10^{-8}$
Warm-up time of the HeNe laser	10...20 min
Operating temperature range	15...30°C
Max. displacement speed of measuring reflector	3 m/s
Geometric Data	
Dimensions (L x W x H): Sensor head with adjustable mount	[199 x 134 x 68] mm
Electronic evaluation and supply unit EU	[450 x 400 x 150] mm
Mass: Sensor head with adjustable mount	1.6 kg
Electronic evaluation and supply unit EU	ca. 8 kg
Elektronische Daten	
Interfaces standard	RS232C, USB
other interfaces on request (/R)	
Cable length between sensor head and 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

*in frequency domain

**rotary point dependent

***least significant bit (LBS)

04/2024 · Subject to change.