

Triple-Beam Interferometer SP 5000 TR



System parameter	SP 5000 TR
Length measuring range	5 m
Length resolution	5 µm
Angular measuring ranges with reflector with plane mirror (recommended distance ≤2 m)	±12.5° ±1.5 arcmin
Angular resolution (at 0.1 nm length resolution)	0.002 arcsec
Beam distances (horizontal and vertical)	12 mm
Wavelength	632.8 nm
Frequency stability of the HeNe laser (after warm-up time)	2·10 ⁻⁸
Warm-up time of the HeNe laser	10...20 min
Operating temperature range	15...30°C
Max. displacement speed of measuring reflector	800 mm/s

Geometric Data

Dimensions (L x W x H): Sensor head with adjustable mount Reflector Electronic supply and evaluation unit	[202 x 137 x 72] mm [45 x 45 x 20] mm [450 x 450 x 150] mm
Mass: Sensor head with adjustable mount Reflector Electronic supply and evaluation unit	1.9 kg 80 g ca. 9.5 kg

Electrical Data

Interfaces standard other interfaces on request	RS232C, USB
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