

Technical Data OptiCentric® 3D

Parameter	OptiCentric® 3D 100	OptiCentric® 3D 300
Measurement accuracy in VIS range ¹⁾	0.1 µm	0.1 µm
Lens rotation	Air bearing AB 100 (option: lens rotation device)	Air bearing AB 300 (option: lens rotation device)
Sample diameter	0.5 mm ... 225 mm	0.5 mm ... 400 mm
Max. sample weight	20 kg	300 kg
Linear stage	Motorized and PC-controlled	Motorized and PC-controlled
Measurement head for VIS spectral range ²⁾	electronic ACM, 200 mm EFL	electronic ACM, 200 mm EFL
Light source ³⁾	High power LED light source	High power LED light source
Measurement accuracy center thickness (OptiSurf® UltraPrecision)	1 µm (0.15 µm)	1 µm (0.15 µm)

1) In stable environment conditions in 100 mm height over the top surface of the air bearing

2) Other electronic autocollimators on request

3) Other on request

Technical Data OptiCentric® Dual

Parameter	OptiCentric® 101 Dual	OptiCentric® 100 Dual	OptiCentric® 300 Dual
Measurement accuracy in VIS range ¹⁾	< 0.1 µm	0.1 µm	0.1 µm
Lens rotation	Air bearing AB 100 Motorized lens rotation device	Air bearing AB 100 (option: lensrotation device)	Air bearing AB 300 (option: lensrotation device)
Sample diameter	With air bearing AB 100: 225 mm (280 mm with restrictions) With lens rotation device: 200 mm	0.5 mm ... 225 mm (0.5 mm ... 125 mm or 0.5 mm ... 200 mm with lens rotation device)	0.5 mm ... 400 mm
Max. sample weight	20 kg 2 kg with lens Rotation device	20 kg 2 kg with lens Rotation device	300 kg
Linear stage	Motorized and PC-controlled	Motorized and PC-controlled	Motorized and PC-controlled
Measurement head for VIS spectral range ²⁾	two electronic ACMS, 200 mm EFL	two electronic ACMS, 200 mm EFL	two electronic ACMS, 200 mm EFL
Light source ³⁾	High power LED light source	High power LED light source	High power LED light source
MWIR or LWIR measurement head	option	option	option

1) In stable environment conditions in 100 mm height over the top surface of the air bearing

2) Other electronic autocollimators on request

3) Other on request

Technical Data OptiCentric® IR

Parameter	OptiCentric® 101 IR	OptiCentric® 300 IR
Lens rotation	High precision air bearing	High precision air bearing
Sample diameter	0.5 mm ... 225 mm	0.5 mm ... 400 mm
Max. sample weight	20 kg	300 kg
Linear stage	Motorized and PC-controlled	Motorized and PC-controlled
Measurement head combinations	VIS-MWIR VIS-LWIR VIS-MWIR-LWIR	VIS-MWIR VIS-LWIR VIS-MWIR-LWIR
Light source ¹⁾	LED Light source	LED Light source
Light source-MWIR ¹⁾	Quantum Cascade Laser 4.05 μm	Quantum Cascade Laser 4.05 μm
Light source -LWIR ¹⁾	Quantum Cascade Laser 9.15 μm	Quantum Cascade Laser 9.15 μm
Measurement accuracy visual autocollimator ²⁾	0.1 μm	0.1 μm
Measurement accuracy IR autocollimator ²⁾	0.25 μm	0.25 μm

1) Other on request

2) In stable environment conditions in 100 mm height over the top surface of the air bearing

Technical Data OptiCentric[®] mit LensAlign

Parameter	LensAlign 2D Air
Measurement accuracy	< 0.1 μm
Alignment accuracy	Up to 1 μm ¹⁾
Cycle Time (measurement and alignment, not including curing time)	< 30 s
Sample size	Up to 50 mm ²⁾

1) Depending on the lens geometry

2) Additional sizes upon request

Technical Data OptiCentric[®] mit LensAlign

Parameter	LensAlign 2D Standard coaxial alignment (3 surfaces)	LensAlign 2D Standard alignment on arbor (1 surface)	LensAlign 2D Advanced coaxial alignment
Sample geometry ¹⁾	$D/(2R) \leq 0.7$	$D/(2R) \leq 0.7$	All geometries
Alignment accuracy	Better 2 μm	Better 2 μm	Better 1 μm
Lens diameters ²⁾	4 mm ... 90 mm	4 mm ... 90 mm	5 mm ... 100 mm
Time for change-over to other sample type (predefined set up)	10 s	10 s	5 min
Cycle time	1 min	10 s	1 min
Cycle time with MultiCentric [®] measurement head	10 s	on request	10 s

1) D = lens diameter, R = radius of curvature of the intermediate lens surface of the doublet

2) Other diameters on request

Technical Data OptiCentric[®] mit LensAlign

Parameter	LensAlign 4D
Positioning accuracy (independent of the arbor quality)	Up to 1 μm for shift and 5 arcsec for tilt
Cycle Time (measurement and alignment, not including curing time)	< 1 minute

- 1) Depending on the lens geometry
- 2) Additional sizes upon request