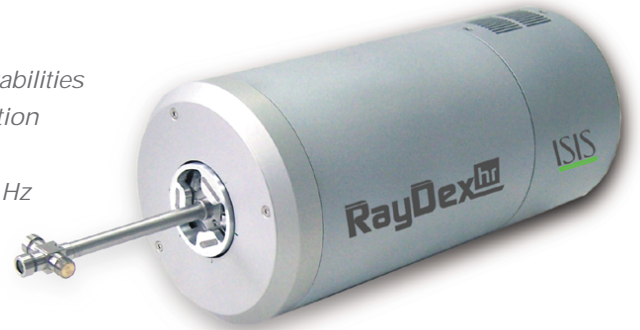


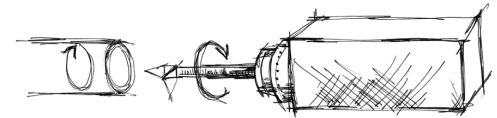
RayDex hr

is of similar design to the RayDex cr sensor but exhibits even higher repeatabilities owing to its greater rotor diameter. This version can attain axial penetration depths (e.g. in a cylinder) approaching 150 mm.

As in the RayDex ha sensor, the measuring beam can rotate at up to 2.5 Hz or be positioned with great accuracy at a predetermined angle.



Wavelength of measuring light	830 nm	1300 nm
Range of diameters	0.9 - 54 mm (probes in 8 specifications)	
Focussing range	0.2 - 7.5 mm (depending on probe)	
Size of measuring spot	5 µm	7 µm
Dynamic repeatability of focussing measurement	200 nm	
Repeatability of rotation	0.005°	
Max. acquisition rate	4 kHz	
Sensor dimensions	Ø 108 mm x 230 mm	



Applications:

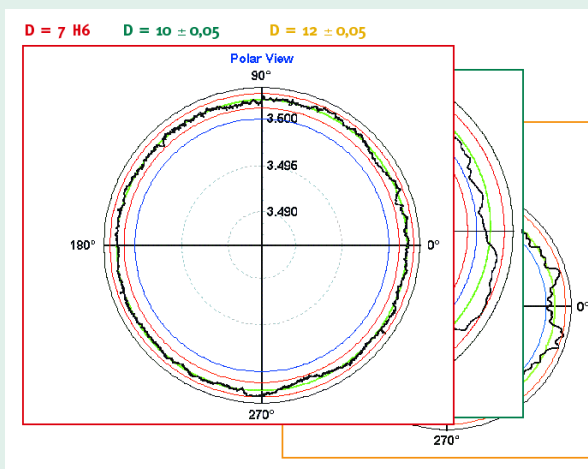
- Objects with freeform surfaces (e.g.. micro components), (small) radii and undercuts
- Complex objects (e.g. injection nozzles, pneumatic cylinders) with narrow and deep drill holes
- Flat objects of low dimensional stability (e.g. wax, soft plastics) or critical surfaces (e.g. glass)
- 2D parts with drill holes and cutouts
- Layer thicknesses of special coatings

Object materials:

- Metals
- Ceramics
- Plastics
- Glass
- Diamond and other coatings

Ihre Vorteile:

- ✓ Very small interior spaces and not limited to rotationally symmetrical objects
- ✓ Axial and radial scan directions can be combined
- ✓ Straightforward change of probe
- ✓ Length/diameter ratios of up to 30 x D
- ✓ 3D contours, diameters, roughness, and other characteristics in a single scan
- ✓ Precise surface data also for (partly) transparent objects
- ✓ Negligible shadowing even at steep trenches
- ✓ Thin layers (coatings or, e.g., oil films) have no influence on topographic measurements
- ✓ Thin layers (< 30 µm) can be measured in the same scan
- ✓ High angular resolution



High-precision determination of diameters and shapes

Flexible design of the system permits evaluation and measurement of numerous characteristics typically found in interior spaces.

Further parameters can be imported into other applications by exporting data point clouds from »TopoSpect« or »TopoLine«.