

Technical data WaveSensor

WaveSensor	150	150 with reflex module
Sensor area	15 mm x 15 mm	15 mm x 15 mm
Wavelength	405 nm ... 1,100 nm ¹⁾	405 nm ... 1,100 nm ¹⁾
Wavefront accuracy	$< \lambda/20$ (RMS)	0.05 μm (RMS)
Wavefront repeatability	$< \lambda/200$ (RMS)	0.005 μm (RMS)
Dynamic range	2,000 λ	2,000 λ
Measurement frequency	up to 12 Hz	up to 12 Hz
Lateral resolution	138 x 138 microlenses	138 x 138 microlenses

1) In accordance with customer's specification

Technical data WaveMaster® for R&D

WaveMaster®	Compact 2	Compact 2 Reflex	Compact 2 Universal
Sample diameter	0.5 mm ... 14 mm ^{2),3)}	4.5 mm ... 18 mm ^{3),5)}	Transmission: 0.5 mm ... 14 mm ^{2),3)} Reflection: 4.5 mm ... 14 mm ^{3),5)}
Flange focal length	-30 mm ... +100 mm ⁴⁾	-	-30 mm ... +100 mm ⁴⁾
Radius of curvature	-	-50 mm ... 30 mm ⁶⁾	-50 mm ... 30 mm ⁶⁾
Sample holder	Single seat, manual positioning	Single seat, manual positioning	Single seat, manual positioning
Max. asphericity	-	≤ 7° ⁷⁾	≤ 7° ⁷⁾

2) Depending on telescope

3) More details upon request

4) Depending on microscope

5) Depending on radius of curvature and illumination lens

6) Depending on sample diameter and illumination lens

7) Local deviations from the best fit sphere

Technical data WaveMaster® for R&D

WaveMaster®	Plan	Field	UST
Sample diameter	0.5 mm ... 14 mm ^{2),3)}	0.5 mm ... 14 mm ^{2),3)}	up to 1,100 mm x 650 mm x 1,200 mm
Sample holder	Single seat, manual positioning	Single seat, manual positioning	Interface for customized lens holders
Max. sample weight	-	-	450 kg
Max. distance between object and image plane	-	-	1,200 mm
Max. field dimensions image side	-	±20 mm	100 mm x 100 mm
Max. field dimensions object side	-	±70°	70 mm x 45 mm

2) Depending on telescope

3) More details upon request

Technical data WaveMaster® for Production

WaveMaster®	PRO 2	PRO 2 Wafer	PRO 2 Plan
Sample diameter	0.5 mm ... 14 mm ²⁾	0.5 mm ... 14 mm ²⁾	0.5 mm ... 14 mm ²⁾
FFL (Flange focal length)	-12 mm ... +50 mm ⁴⁾	-12 mm ... +50 mm ⁴⁾	-
Sample holder	Tray	Wafer holder	Tray
Measurement time per lens	< 3 s ⁸⁾	< 3 s ⁸⁾	< 3 s ⁸⁾
Sample throughput per hour	≥ 1,200 lens ⁸⁾	≥ 1,200 lens ⁸⁾	≥ 1,200 lens ⁸⁾
Lens per tray	Max. 148 ⁸⁾	-	Max. 148 ⁸⁾
Exchange time for tray of lenses	10 s	10 s	10 s
Wafer tray exchange time, incl. alignment	< 2 min	< 2 min	< 2 min
Setup time for new lens design	< 5 min	< 5 min	< 5 min

2) Depending on telescope

4) Depending on microscope

8) Depending on sample