

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