

CLEAVEMETER 3D+™

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Extremely accurate Optical fiber end-face interferometer with three-dimensional surface topography reconstruction

- Class leading accuracy - 0.005°
- Full resolution surface topography reconstruction
- 2D view of surface topography and pointwise slope
- 3D view of surface topography with camera and lighting control
- Extremely accurate, operator independent measurements of cleave angle and surface flatness over arbitrary diameters
- Optional pass/fail indication of cleave angle for fast operation in production environments



The CLEAVEMETER 3D+™ is a non-contact interferometer designed for high accuracy inspecting of end-faces for cleaved or polished optical fibers with cladding diameters of 125µm to 1200µm. The CLEAVEMETER 3D+™ gives immediate and precise information on important end face properties such as flatness, perpendicularity, hackles and dust. Extremely accurate measurements of both cleave angle and surface flatness over arbitrary diameters can be performed on the reconstructed end-face surface. These measurements are carried out automatically, with full operator independence.

This makes the system well suited not only for detailed cleave quality analysis in laboratory environments, but also for close production monitoring. In addition to cleave angles, the system can also be used to measure a number of other properties such as plane angles, fiber diameters and the distance between points.

The software allows the user to view the pointwise slope across the whole fiber end-face, a very useful tool for spotting small scale irregularities and crack propagation behavior. The CLEAVEMETER 3D+™ comes in a small, ergonomic benchtop design and connects to the USB port of a PC running the host application. A Shutter option is also available for this system. This option allows the user to temporarily eliminate the interference patterns for a more detailed view of the end face.



TECHNICAL DATA

| | |
|-------------------|---------------------------------------|
| Fiber cladding | 125-1200µm* |
| Camera resolution | 1280×1024 pixels |
| Image scale | 1.25µm per pixel |
| Image file format | 8-bit JPEG, PNG, TIFF, BMP/24-bit BMP |
| PC connection | USB 2.0 port |
| Power supply | Through USB port |
| Dimensions | 97 mm (W) x 179 mm (D) x 142 mm (H) |
| Weight | 1.6 kg |

NYFORS part number: 30100032

CLEAVE ANGLE ACCURACY

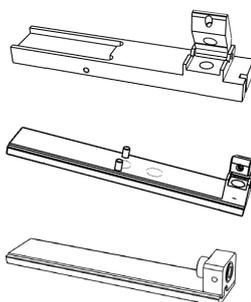
Absolute accuracy 0.005° degrees standard deviation

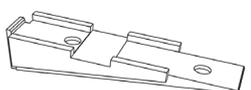
*CLEAVEMETER 3D+ unit calibrated by NYFORS for specific fiber cladding

For more information about system accuracy, please contact us at:

info@nyfors.com.

WWW.NYFORS.COM

| ACCESSORIES FOR CLEAVEMETER | | | | | CM 2 | CM 3D | CM 3D+ |
|---|-----------|--------------------|---------------------------------|---------------------------------|------|-------|--------|
| Adaptor plate | Type | Cladding diameter | Article number | Article description | | | |
|  | FJK | 115-210µm | 30100001 | Adaptor plate, FJK, 115-210µm | • | • | |
| | FJK | 200-529µm | 30100002 | Adaptor plate, FJK, 200-529µm | • | • | |
| | FJK | 510-800µm | 30100003 | Adaptor plate, FJK, 510-800µm | • | • | |
| | FJK | 800-1200µm | 30100004 | Adaptor plate, FJK, 800-1200µm | • | • | |
| | NYFORS | Customer Specified | 30100007 | Adaptor plate, NYFORS, Generic | • | • | |
| | Ferrule | Customer Specified | 30100020 | Adaptor plate, Ferrule, Generic | • | • | |
| | FSMA | - | 30100024 | Adaptor plate, FSMA | • | • | |
| | SMA | - | 30100027 | Adaptor plate, SMA | • | • | |
| | FITEL | 115-210µm | 30100022 | Adaptor plate, FITEL, 115-210µm | • | • | |
| FITEL | 200-529µm | 30100023 | Adaptor plate, FITEL, 115-210µm | • | • | | |

| Angle adaptor plate | Angle | Article number | Article description | | | |
|---|--------------------|----------------|------------------------------|---|---|--|
|  | 4° | 30100021 | Angle adaptor plate, 4deg | • | • | |
| | 8° | 30100009 | Angle adaptor plate, 8deg | • | • | |
| | 15° | 30100008 | Angle adaptor plate, 15deg | • | • | |
| | Customer Specified | 30100010 | Angle adaptor plate, Generic | • | • | |

| Options | Type | Article number | Article description | | | |
|---------|------------------|----------------|------------------------------|---|---|---|
| | Premium license | 30100014 | Premium SW License | • | | |
| | Shutter Option | 30100036 | CLEAVEMETER Shutter Option | • | • | • |
| | Autofocus Option | 30100037 | CLEAVEMETER Autofocus Option | | • | |