

NFP/FFP SIMULTANEOUS MEASUREMENT SYSTEM

Simultaneous measurement of NFP & FFP by a single optical unit.

NFP/FFP Simultaneous measurement system realizes simultaneous observation and analysis of NFP and FFP by a single optical unit. Previously, for measurement and analysis of NFP and FFP by optical method, dedicated two kinds of optics, NFP and FFP measurement optics are needed each. **NFP&FFP simultaneous measurement system with M-Scope type D** realized simultaneous observation and analysis of NFP and FFP without changing optics.

(Features)

- ○M-Scope type D, NFP/FFP simultaneous measurement optics
 - Simultaneous observation & analysis of NFP and FFP by a single optical unit.
- OWorking distance during FFP measurement is approx. 17 mm.
- OPossible to measure in 400nm to 1700nm wavelength range by selecting detector.
- Optical beam analysis module **AP013**, specially designed high-functional image processing software for optical beam profile analysis
 - All-in-one package of PC, optical beam analysis software, detector driver, correction data.
 - High-performance image processing software for optical beam profile measurement **Optimetrics BA Standard** is pre-installed.

[Standard component]

Optics

- NFP/FFP simultaneous measurement optics M-Scope type D
- OMeasurement wavelength
 - Please specify the measurement wavelength because AR coating to some optical parts is required.

OAvailable detectors selection

- 400~1100nm: Hi-resolution CMOS detector ISA071/ISA071GL
- ●950~1700nm: InGaAs high sensitivity NIR detector ISA041H2
- ●400~1700nm: InGaAs high resolution NIR detector ISA041HRA
- Regarding the field of view and pixel resolution during NFP measurement and the measurement angle coverage and pixel resolution during FFP measurement by the detector used, please refer to P50 [Detector selection and NFP/FFP simultaneous measurement specifications]

Optical beam analysis module AP013

- PC for image processing, optical beam analysis software **Optometrics BA Standard**, detector driver, calibration data, USB key OAccessories
- Cables, instruction manuals, etc.

[Option]

Objective lens selection

- Objective lens for FFP measurement: 50× (fixed)
- Objective lens for NFP measurement: Selectable

Option for optics (for **M-Scope type D**)

- 2× intermediate lens port MS-OP011-RL2 : Intermediate lens unit that doubles the overall magnification
- $\bullet \ 1/2 \times \ intermediate \ lens \ port \ \ \textbf{MS-OP011-RLH} : Intermediate \ lens \ unit \ that \ halves \ the \ overall \ magnification$
- Coaxial epi-illumination port MS-OP011-CEP : Coaxial epi-illumination port with removable half mirror

OND filter

- Visible (400~700nm): **NDF-5** (5 types per set)
- NIR (700~1100nm): **NDF NIR-5** (5 types per set)
- IR (1310~1550nm): **NDF IR-5** (5 types per set)

OCoaxial epi-illumination light source

- ◆ Visible~NIR: LED epi-illumination system
- IR: 950nm IR-LED epi-illumination system

Optics bench

- Optics bench for fiber measurement with manual stages
- Vertical setting optics bench

[Component selection of NFP/FFP simultaneous measurement system]



