

OPTICAL BEAM FFP MEASUREMENT SYSTEM

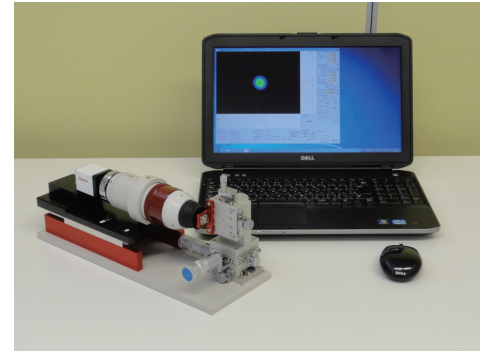
FFP measurement and analysis system in combination with FFP measurement optics & image processing.

[Product overview]

Optical beam FFP (Far Field Pattern) measurement system is FFP analysis system by optical and image processing method, widely applicable to FFP analysis of optical device and optical module such as laser diode, optical fiber, polymer waveguide for OPCB substrate and various waveguide, etc.

[Feature]

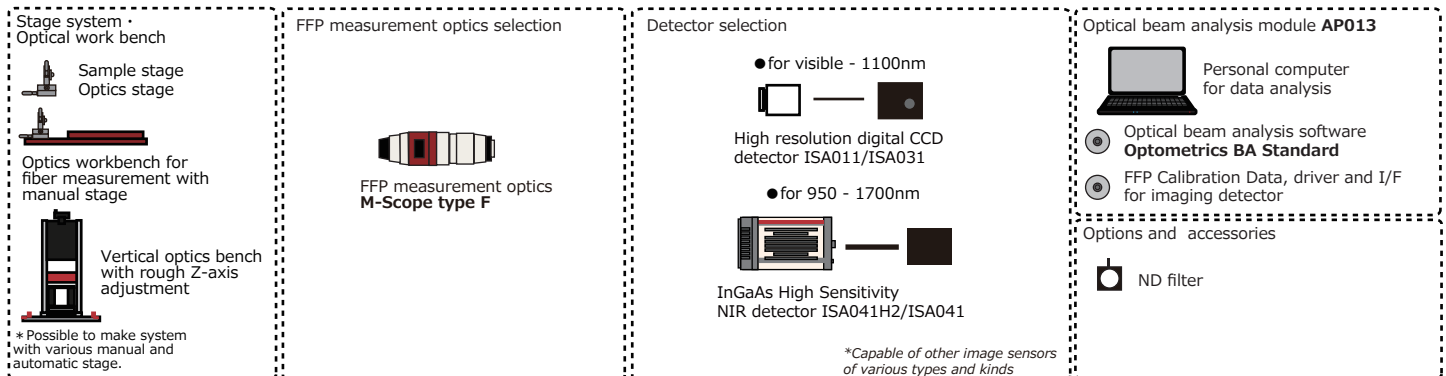
- Synos' **M-Scope type F**, FFP measurement optics, is adopted as FFP measurement optics, realizes quick, easy, and realtime measurement
- By selecting detector, it will be applicable for optical beam profile observation and analysis from visible to NIR wavelength.
 - *For visible-1100nm: **ISA011**, high resolution digital CCD detector
 - *For 950nm-1700nm: **ISA041H2**, InGaAs high sensitivity NIR detector
- Optical beam analysis module **AP013**, specially designed high-functional image processing system for optical beam profile analysis
 - *Essential and useful functionality for NFP, FFP, beam profile analysis, EF/EAF analysis are equipped in Synos' original optical beam analysis software **Optometrics BA Standard**.
- High system expandability with various optional units
 - *In combination with various positioning stages, it is possible to build up easy-to-use measurement system. In addition, with Synos' underfilled launch optics **M-Scope type G** and mode-selective launch optics **M-Scope type ML**, it is possible to build up advanced FFP measurement system for multimode device such as MMF, OPCB waveguide under special launch condition.



[Application]

- FFP measurement and analysis of various light emitted device such as laser, laser diode, etc.
- FFP and N.A. measurement and analysis of various optical fibers such as SMF, MMF, POF etc.
- FFP and N.A. measurement and analysis of waveguide modules, polymer waveguide for OPCB substrate and connector etc.
- Inclination measurement and analysis of 45° mirror installed in OPCB substrate.
- Encircled angular flux analysis of various MMF (multimode optical fiber)
- Assembling adjustment between various optical module and micro lens module

[Component selection]



*A variety of system setup is possible depending on the purpose and application. Please feel free to contact us.

[Main component]

- FFP measurement optics
 - *FFP measurement optics **M-Scope type F**
 - ☞ About FFP measurement optics in details, please refer to P8.
- Imaging detector selection (recommendation)
 - *For visible-1100nm: Synos' Hi-resolution digital CCD detector **ISA011/ISA031**
 - *For 950nm-1700nm: Synos' InGaAs high sensitivity NIR detector **ISA041**
 - ☞ About imaging detector in details, please refer to P25-28.
- Optical beam analysis module **AP-013**
 - *Personal Computer system for data analysis
 - *Image processor board & interface board set
 - *Optical beam analysis software : **Optometrics BA Standard** (Optometrics BA Standard main program, calibration data set, driver and I/F software for imaging detector)
 - ☞ About AP013 in details, please refer to P24.
- Standard accessories
 - *Cables, manuals

[Option, accessory]

- ND filter
 - *Possible to supply due to attenuation ratio, measurement wavelength, etc.
 - ☞ About ND filter in details, please refer to P31.
- Optical workbench
 - *Optical workbench for fiber measurement
 - *Vertical setup optical workbench
 - ☞ About optical workbench in details, please refer to P32.