

# HIGH POWER LASER NFP MEASUREMENT SYSTEM

Optical beam profile measurement system especially for high power laser application.

### [Product overview]

**High power laser NFP measurement system** is optimized especially for optical beam profile measurement of high power laser .

Synos' **M-Scope type H**, NFP measurement optics for high power laser, is adopted as NFP measurement optics in this system. In combination with **M-Scope type H**, imaging detector and image processing system, it is widely applicable for NFP & optical beam observation, measurement and analysis of high power laser and related module, component.

This system covers measurement wavelength of 400nm - 700nm.

#### (Feature)

- \* Synos' **M-Scope type H**, NFP measurement optics for high power laser, is adopted as NFP measurement optics
  - Beam sampler and ND filter for attenuation of high power laser
  - Equipping coaxial epi-illumination port for image observation
- \* This system covers 400nm 700nm wavelength range
- \* ISA011, high resolution digital CCD detector, is selected as imaging 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.

## [Main component]

- \* NFP measurement optics selection
  - NFP measurement optics for high power laser **M-Scope type H**
- About NFP measurement optics for high power laser in details, please refer to P11.
- \* Image sensor selection (recommendation)
  - For visible 1100nm : Synos' Hi-resolution digital CCD detector ISA011
- About high resolution digital CCD detector in details, please refer to P27.
- \* 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

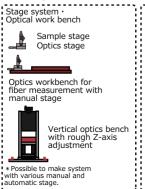
# [Option, accessory]

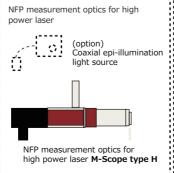
- \* 2x Intermediate lens
- \* ND filter
- Possible to supply due to attenation ratio, measurement wavelength, etc.
- \* Coaxial epi-illumination light source
  - LED type (for visible 850nm wavelength range)
- About coaxial epi-illumination light source in details, please refer to P32.
- \* Optical workbench
  - Optical workbench for fiber measurement
- Vertical setup optical workbench
- About optical workbench in details, please refer to P32.

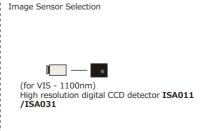
# [Application]

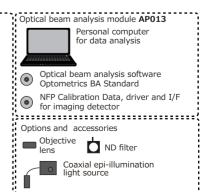
- \* NFP measurement, beam profile measurement, beam shape measurement of high power laser and related optical module
- Beam profile measurement of high power laser for laser headlight, laser machining, medical, solid laser excitation, printing, etc.
- Fiber laser
- Another high power laser and related module

## [Component selection]









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