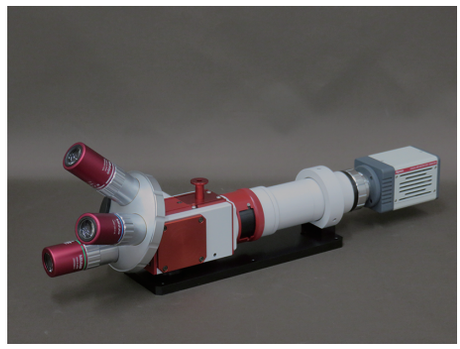
M-Scope type S　SOPHISTICATED OPTICAL BEAM NFP MEASUREMENT OPTICS

Best suit for optical beam pattern observation and analysis. Widely applied general purpose microscope-type NFP optics.



M-Scope type S is a high-performance optical system for optical beam observation, beam profile measurement and analysis, NFP measurement of laser diodes, optical fibers, optical waveguides, and various light-emitting devices and modules.

【Features】

○Equipped with manual 4-hole objective revolver as standard
○Can be equipped with coaxial epi-illumination port (optional). Possible to observe real microscopic image observation and positioning.
○Up to 200x optical magnification with 2x intermediate lens port (optional) and 100x objective lens.
○Possible to measure in 400nm to 1700nm wavelength range by selecting detector.
○High-performance NFP measurement system can be constructed by using Synos' optical beam analysis module **AP013** together.

【Summary of specifications】

○Mesurement method: Magnifying optics & image processing
○Objective lens change: By manual revolver
○Objective lens: Mitsutoyo M-Plan Apo series
○Intermediate lens: 1×
○Maximum optical magnification: 100× (100× objectibe lens)
○Epi-illumination: Option
○Attenuate: By neutral density filter
○Camera mount: C mount

【Available detectors selection】

○for 400~1100nm: Hi-resolution CMOS detector **ISA071**, etc.
○for 950~1700nm: InGaAs NIR detector **ISA041H2**, etc.
○for 400~1700nm: InGaAs NIR derector **ISA041HRA**, etc.
☞Regarding the field of view and pixel resolution during NFP measurement by the detector used, please refer to P50 【Detector selection and NFP measurement specifications】

【Option】

○Option for **M-Scope type S** optics
- ●2× intermediate lens port **MS-OP011-RL2**
  Intermediate lens unit that doubles the overall magnification of the optical system. (up to 200× with 100× objective lens)
- ●1/2× intermediate lens port **MS-OP011-RLH**
  Intermediate lens unit that halves the overall magnification of the optical system.
- ●Coaxial epi-illumination port **MS-OP011-CEP**
  Coaxial epi-illumination port with removable half mirror.

○Accessories for optics
- ●Objective lens, ND filter, coaxial epi- illumination light source, optics bench, etc.

【Standard component】

○Main optics: 1
○Optics base: 1

M-Scope type L　SIMPLIFIED OPTICAL BEAM NFP MEASUREMENT OPTICS

Cost-effective model of NFP optics with simplified functionality.

M-Scope type L is a simple functionality, less expensive model, without manual revolver and LED coaxial epi-illumination port.

【Features】

○Simple functionality, less expensive model, without manual revolver and coaxial epi-illumination port.
○Possible to measure in 400nm to 1700nm wavelength range by selecting detector.
○NFP measurement system can be constructed by using Synos' optical beam analysis module **AP013** together.
○Easy to mount on various stages in a small housing.

【Summary of specifications】

○Mesurement method: Magnifying optics & image processing
○Objective lens change: By re-mounting objective lens
○Objective lens: Mitsutoyo M-Plan Apo series
○Intermediate lens: 1×
○Maximum optical magnification: 100× (100× objectibe lens)
○Epi-illumination: Not available
○Attenuate: By neutral density filter
○Camera mount: C mount

【Available detectors selection】

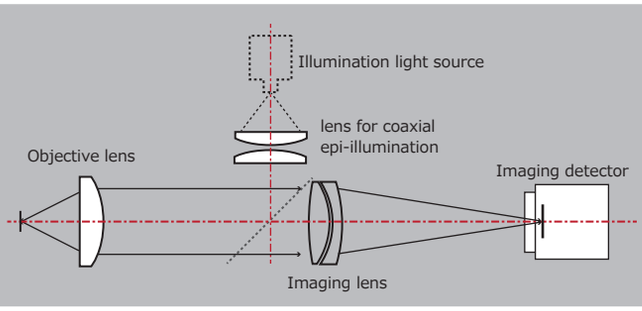
○for 400~1100nm: Hi-resolution CMOS detector **ISA071**, etc.
○for 950~1700nm: InGaAs NIR detector **ISA041H2**, etc.
○for 400~1700nm: InGaAs NIR derector **ISA041HRA**, etc.
☞Regarding the field of view and pixel resolution during NFP measurement by the detector used, please refer to P50 【Detector selection and NFP measurement specifications】

【Standard component】

○Main optics: 1
○Optics base: 1

【Option】

○Accessories for optics
- ●Objective lens, ND filter, optics bench, etc.



☞Technical information【Simple structure of M-Scope type S】

The measurement light emitted from the sample is magnified by the first-stage objective lens and imaged on the image detector at the latter stage of the optical system by the imaging lens. The captured images are processed on a PC and analyzed for the emission beam profile, beam width, power distribution, etc. of the sample.