

3.6 Near Field Profilers

Camera Based Near-Field Profiler

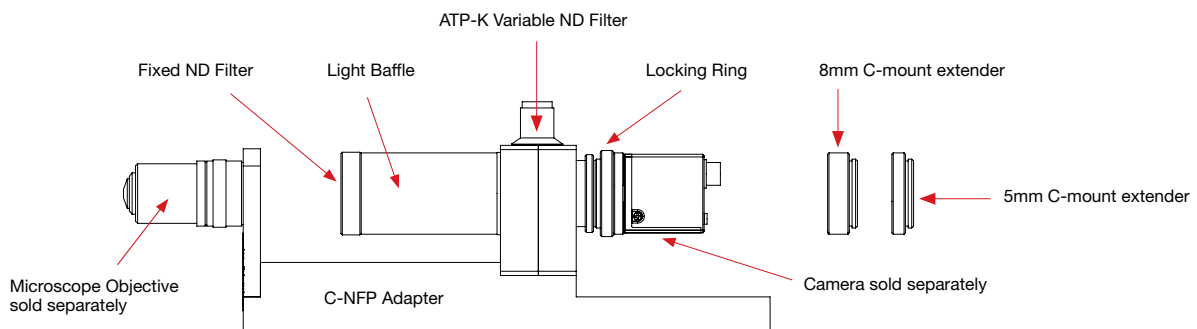
- Allows measurement of beams normally too small for camera profiler
- Expands beam to reduce power/energy density
- Provides near-field profile of fibers, LD junctions, and other small sources
- Can be used to measure tightly focused beam with camera and attenuation
- Nominal 10X, 20X, 40X, 60X Beam expansion available
- Easily calibrated to provide absolute measurement values
- Built-in continuously variable attenuation
- C-mount for attachment to any silicon CCD camera profiler
- Camera and BeamGage software purchased separately

Near field profiling can also be used with camera profilers to analyze small beams, and involves a microscope objective lens to image the beam onto a camera detector array. This technique expands the measurement range of the camera to include smaller beams, which could not be ordinarily measured due to the pixel size of the detector array. Near field profiling is performed in fiber and waveguide analysis, lens characterization, and other applications where beams 50 microns or smaller are analyzed. While there are more accurate techniques to measure these beam sizes, the camera provides two-dimensional information that cannot always be obtained through knife-edge or scanning slit

methods. This camera accessory includes base plate for mounting camera and Microscope Objective, ATP-K variable attenuator, 50mm C-Mount and an 8mm and 5mm spacer. User selectable magnification lenses, camera and BeamGage must be purchased separately.

The near field of the test beam or sample is imaged with the microscope objective lens and relayed to the camera. The bracket mounting fixture holds both the lens and camera, which itself can be mounting on a positioner or optical rail. This complete system provides everything necessary to perform near-field measurements right out of the box.

C-mount NFP Adapter Assembly



Ordering Information

Item	Description						P/N
C-NFP Assy	Includes base plate for mounting camera and Microscope Objective, ATP-K variable attenuator, 50mm C-Mount and an 8mm and 5mm spacer						SP90291
Item	Description	Power	Effective Focal Length (mm)	Field of View (mm)	Working Distance (mm)	NA	P/N
60X	60X, Microscope objective	60X	3.21	0.30	0.15	0.85	SP90292
40X	40X, Microscope objective	40X	4.35	0.45	0.60	0.65	SP90293
20X	20X, Microscope objective	20X	8.33	0.90	3.75	0.40	SP90294
10x	10X, Microscope objective	10X	17.02	1.80	4.40	0.25	SP90295