

Optical Fiber Adaptors and Fiber Plugs

Bruker Optics offers various fiber optical accessories for the SURE_SPECTRUM imaging spectrographs.



The Optical Fiber Adaptors perform two functions: (a) images the optical fiber(s) into the plane of the spectrometer entrance slit thereby eliminating the risk of physically damaging the slit mechanism; and, (b) matches the $f/\#$ of the optical fibers to the $f/\#$ of the spectrometer thereby optimizing throughput and minimizing stray light. The optical fiber adapter comes with adapters for both single fibers using a SMA connector, or for multiple fibers using a special high-precision multiple fiber receptor which mates with a special high-precision male locking plug.

Features

- Images optical fibers into the plane of the spectrometer entrance slit
- Eliminates the risk of damage to the entrance slit
- Matches the $f/\#$ of the optical fibers to the $f/\#$ of the spectrometer
- Minimizes stray light

Fiber Tip Lens Assembly

An “optical probe” that images and launches light from a spectral source into an optical fiber. Each probe consists of a 0.75 inch diameter fixed cylinder with a standard SMA connector, and a smaller sliding cylinder containing a 12.5mm

diameter 75mm focal length fused silica lens. Range of focus is 20cm to infinity; length is adjustable from 3.5 to 5.0 inches. Includes mounting bracket for probe on 0.5 inch diameter mounting post. Bruker Optics also provides custom fiber assembly.

Optical Fibers

Available as single fibers or as branched arrays. Single fibers are terminated with standard SMA connectors at both ends. Branched fibers arrays are terminated with standard SMA connectors at the end of each branch and have the special high-precision male locking plug for precise connection to the OFA at the spectrometer input. The fibers will be in physical contact in a vertical column and centered in the slit. When ordering, specify fused silica type (wavelength range), number of fibers, fiber core diameter and fiber length.

Features

- UV/VIS or VIS/NIR
- Single, bundles or branched arrays
- Optional Stainless Steel jacket
- User specified core diameter and length