

# 80Spec

## AT A GLANCE

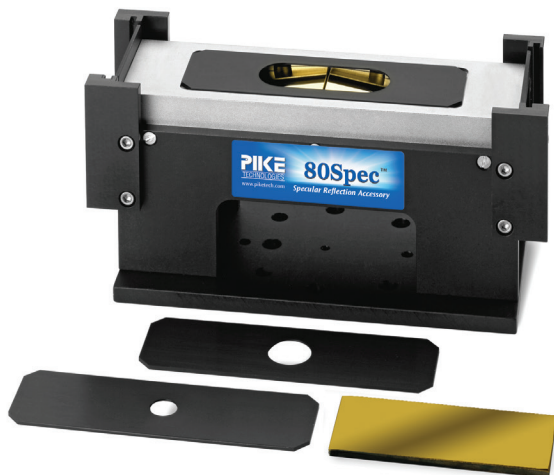
- ▶ Measurement of thin films and mono-molecular layers
- ▶ Fixed 80-degree angle of incidence
- ▶ Gold-coated reflective optics for highest throughput grazing angle analysis
- ▶ Integrated polarizer mounts
- ▶ Baseplate mount design for stable operation and collection of high-quality spectra

The 80Spec is ideal for the measurement of relatively thin films and mono-molecular layers by specular reflection.

Samples are simply placed face down across the top of the accessory and the spectrum is collected.

The 80Spec is available in two versions. The most popular version includes three sample masks to define smaller areas on a sample, and is recommended for smaller samples or for measurement of variations in thin film coatings. The basic configuration features a flat sampling surface with fixed sampling port (2 3/8" x 3/4"). This version is ideal for analysis of larger, uniform samples.

Generally, the measurement of ultra-thin film samples—especially monolayers—is significantly enhanced by using p-polarized light, with the electric field vector perpendicular to the sample surface. The 80Spec includes polarizer mounts on both incoming and outgoing beams for positioning optional manual or automated IR polarizers.



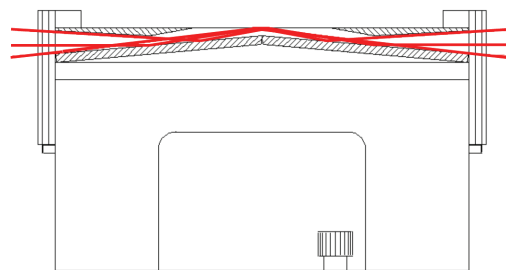
PART NUMBER	DESCRIPTION
012-11XX	80Spec – 80° Specular Reflection Accessory with Sample Masks (2", 5/8" and 3/8") Includes a gold substrate alignment mirror, dual polarizer mount and FTIR base mount
012-10XX	80Spec – 80° Specular Reflection Accessory Includes a gold substrate alignment mirror, dual polarizer mount and FTIR base mount

**Notes:** Replace XX with your spectrometer's Instrument Code listed in the back of the catalog. For compact-size spectrometers, only one polarizer mount may be included due to sample compartment width restriction.

### Replacement Parts and Options

010-3010	Specular Mask Set
300-0002	Gold Substrate Alignment Mirror, 1.25 x 3.0"
090-1000	Manual Polarizer, ZnSe
090-1200	Manual Polarizer, KRS-5
090-3000	Precision Manual Polarizer, ZnSe
090-3200	Precision Manual Polarizer, KRS-5
090-5000	Precision Automated USB Polarizer, ZnSe
090-5100	Precision Automated USB Polarizer, KRS-5

**Note:** For more polarizer options see the polarizer section of this catalog.



Beam path within the 80Spec specular reflection accessory.



FTIR spectrum of an ultra-thin film on a reflective substrate using p-polarized IR beam.