

OL SERIES 750-75MA

Automated Goniospectroreflectance Attachment

The OL 750-75MA Goniospectroreflectance Attachment is used with the OL Series 750 Spectroradiometer Systems to measure the reflectance of materials as a function of both wavelength and angle of incidence. The all-mirror design enables this attachment to be used over the entire 0.2 – 30 μm wavelength range.¹ The OL 750-75MA has a computer-controlled motor drive system, which permits automated electronic control of the Sample Incident Angle and Detector View Angle.

The mirror optics collect the monochromatic flux and forms an approximate 1.5X magnified image of the monochromator's exit slit aperture at the detector. A typical 3.0 mm diameter circular monochromator exit slit will form a 4.5 mm spot at the detector. Dual concentric rotary tables for the sample holder and detector mount are driven by independently-controlled precision worm gears.

Samples are held in an adjustable mount at the center of a 6" rotary table. The standard sample holder can accommodate a 2" to 4" circular sample, or 2" x 2" or 4" x 6" rectangular samples. Sample thickness can range from 1/16" to 1/2". Custom sample holders and beam polarizers are also available.

An important feature of the OL 750-75MA is the "self-calibrating" capability. Accurate measurements of specular reflectance can be made without the use of a standard (calibrated mirror). The detector view angle may be positioned at the 0° incident angle position for a 100% reading. Specular reflectance measurements can be made on various samples from 10° to 60° with an angular accuracy of ± 1°.

¹ The OL 750-75MA can be used over the entire 0.2 to 30 μm wavelength range provided the spectroradiometer is configured with the appropriate gratings, blocking filters, detectors and sources.

SPECIFICATIONS	
Wavelength Range	200 nm to 30 μ
Sample Incident Angle	10° to 60°
Detector Viewing Angle	20° to 180°
Angular Resolution	0.1°
Image Modification	1.5X
Dimensions	31"L x 20"W x 13"H (78.74 cm x 50.8 cm x 33.02 cm)
Weight	79 lbs. (35.83 kg)

TYPICAL OL 750-75MA SYSTEM OPTICAL LAYOUT

