



**ESSENT
OPTICS**

We make
measuring optics easy

LINZA 150

HIGH-PERFORMANCE SPECTROPHOTOMETERS FOR OPTICS



TRANSMITTANCE
OF LENSES



TRANSMITTANCE
OF LENS
ASSEMBLIES



REFLECTANCE
OF LENSES



TYPES OF LENSES:

- CONVEX
- CONCAVE
- CYLINDRICAL
- ASPHERIC
- MULTI-LENS ASSEMBLIES

DIAMETER OF LENSES

- 10 - 150 mm

WAVELENGTH RANGE

- 185 - 1700 nm

SPECIFICATIONS

PARAMETER	DESCRIPTION	
MODEL	0217	0417
OPTICAL CONFIGURATION		
Photometric functions	%T, %R	
Effective wavelength range, nm	185 - 1700	380 - 1700
Optical scheme of monochromator	Czerny-Turner	
Optics	Mirror, Al + MgF2	
Reference channel	Yes	
Wavelength scanning speed, nm / min	3000 (at 5 nm wavelength sampling pitch)	
Spot size on measured sample, mm	Transmittance: 6,0 × 5,5 mm Reflectance: 1,0 × 1,0 mm	
Wavelength sampling pitch, nm	0,25 - 100	
Ultimate spectral resolution, nm 185 (380) - 990 nm 990 - 1700 nm	2,00 4,00	
Wavelength accuracy, nm	0,5	
Wavelength repeat accuracy, nm	+ / - 0,25	
Scattered light level, % max (@ 532 nm)	< 0,1	
Photometric accuracy	NIST SRM 930: +/- 0,003 Abs (1Abs) NIST SRM 1930: +/- 0,003 Abs (0,33 Abs); +/- 0,006 Abs (2 Abs)	
Photometric repeat accuracy	NIST SRM 930: +/- 0,0006 Abs (1Abs) NIST SRM 1930: +/- 0,0002 Abs (0,33 Abs); +/- 0,005 Abs (2 Abs) Determined using 0,1 second accumulation, maximum deviation for 10 subsequent measurements	
Stability of baseline (UV-VIS), % / hour	< 0,1	
Light sources	Deuterium lamp, Halogen lamp, HgAr wavelength calibration verification lamp	Halogen lamp, HgAr wavelength calibration verification lamp
SAMPLE COMPARTMENT		
Lens diameter, mm	Transmittance: 10 - 150 mm Reflectance: 10 - 90 mm (self-centering lens mount) 10 - 115 mm (customized lens holder)	
Reflectance measurement	Lens radius: -∞ ... - 15 mm / + 15 mm ... +∞	
Transmittance measurement	Focal length of the measured sample: -∞ ... - 20 mm / + 20 mm ... +∞	
End to end maximum length of the lens assembly, mm	240	
Sampling pitch for determination of measurement point on lens surface (off-axis reflectance measurement), mm	0,01	
Angle of incidence (on-axis / off-axis reflectance measurement), deg	12	
INTERFACE, DIMENSIONS AND WEIGHT		
Interface	USB 2.0	
Power consumption, Watt	110	
Power input	110-220 VAC, 50-60 Hz	
Width x Depth x Height, mm (inches)	680 × 440 × 360 (26 3/4" x 17 1/3" x 14 1/5")	
Net weight, kg (lbs)	50 (110)	