

PHOTON RT 7512

LWIR SPECTRAL MEASUREMENTS OF PLANO OPTICS AND PRISMS



SPECIFICATIONS

PARAMETER	DESCRIPTION
MODEL	7512
OPTICAL CONFIGURATION	
Photometric functions	%T, %R
Effective wavelength range, μm	7,5 - 12,5
Built-in polarizers, μm	7,5 - 12,5
Optical scheme of monochromator	Czerny-Turner
Optics	Mirror: Au, Lenses: ZnSe + AR
Measurement of Transmission	Variable angle measurements: 0 - 60 deg angles of incidence
Measurement of Reflection	Interchangeable sample stages with fixed angles of incidence: 10, 30, 45 and 60 deg Reference sample: gold mirror
Turning pitch angle of sample stage	0,01 deg
Beam displacement compensation, mm	40
Unattended polarization measurements with built-in polarizers	S, P, (S+P)/2
Wavelength sampling pitch, nm	0,5 - 100,0
Spot size on measured sample, mm	6,0 x 3,0
Ultimate spectral resolution, nm	8 (non-polarized light)
Wavelength accuracy, nm	3,6
Wavelength repeat accuracy, nm	+/- 0,9
Photometric accuracy	+/- 0,2 % (47% T, $\lambda_0 = 10,6\mu\text{m}$, AOI = 3°)
Photometric repeat accuracy	+/- 0,1 %
Stability of baseline (UV-VIS), %/hour*	+/- 0,3 %
Light sources	IR lamp HgAr wavelength calibration verification lamp
SAMPLE COMPARTMENT	
Maximum sample size, mm	150 x 200
Maximum sample thickness, mm	40
Planar sample stage	For measurement of transmission and reflection of planar samples with size bigger than 12 x 10 mm
Synchronized positioning	Synchronized computer controlled positioning for sample stage and photodetectors unit depending on the chosen photometric function
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)	760 x 340 x 370 (30" x 13,39" x 14,57")
Net weight, kg (lbs)	51 (112)

* after 1 hour warm-up time