ESSENT OPTICS

OUTSTANDING SPECTRAL MEASUREMENTS OF OPTICAL COATINGS

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 - 14,0
Built-in polarizers, µm	7,5 - 14,0
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, deg	0,01
Beam displacement compensation, mm	40
Unattended polarization measurements with buil-in polarizers	S, P, (S + P) / 2
Wavelength sampling pitch, nm	5 - 100
Spot size on the measured sample (non-polarized light), mm	2,0 x 6,0 (W x H)
Ultimate spectral resolution (non-polarized light), nm	15
Wavelength accuracy, nm	+ / - 4,0
Wavelength repeat accuracy, nm	+ / - 2,0
Photometric accuracy ($47\%\ T, \lambda_0$ = 10,6µm, AOI = 4^0)	+ / - 0,2%
Photometric repeat accuracy	+ / - 0,1%
Stability of baseline (7,8µm - 13,0µm), % / hour*	+ / - 0,3%
Stray light level (7,5µm - 12,0µm), % / hour*	< 0,2
Light sources	IR lamp HgAr wavelenth 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 8.0mm x 12mm
Synchronized positioning	Synchronized computer controlled positioning for sample stage and photodetectors unit (transmission)
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	760 x 380 x 350 (30" x 15.0" x 13 3/5")
Net weight, kg (lbs)	51 (112)
* 60 minutes warm-up time	

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