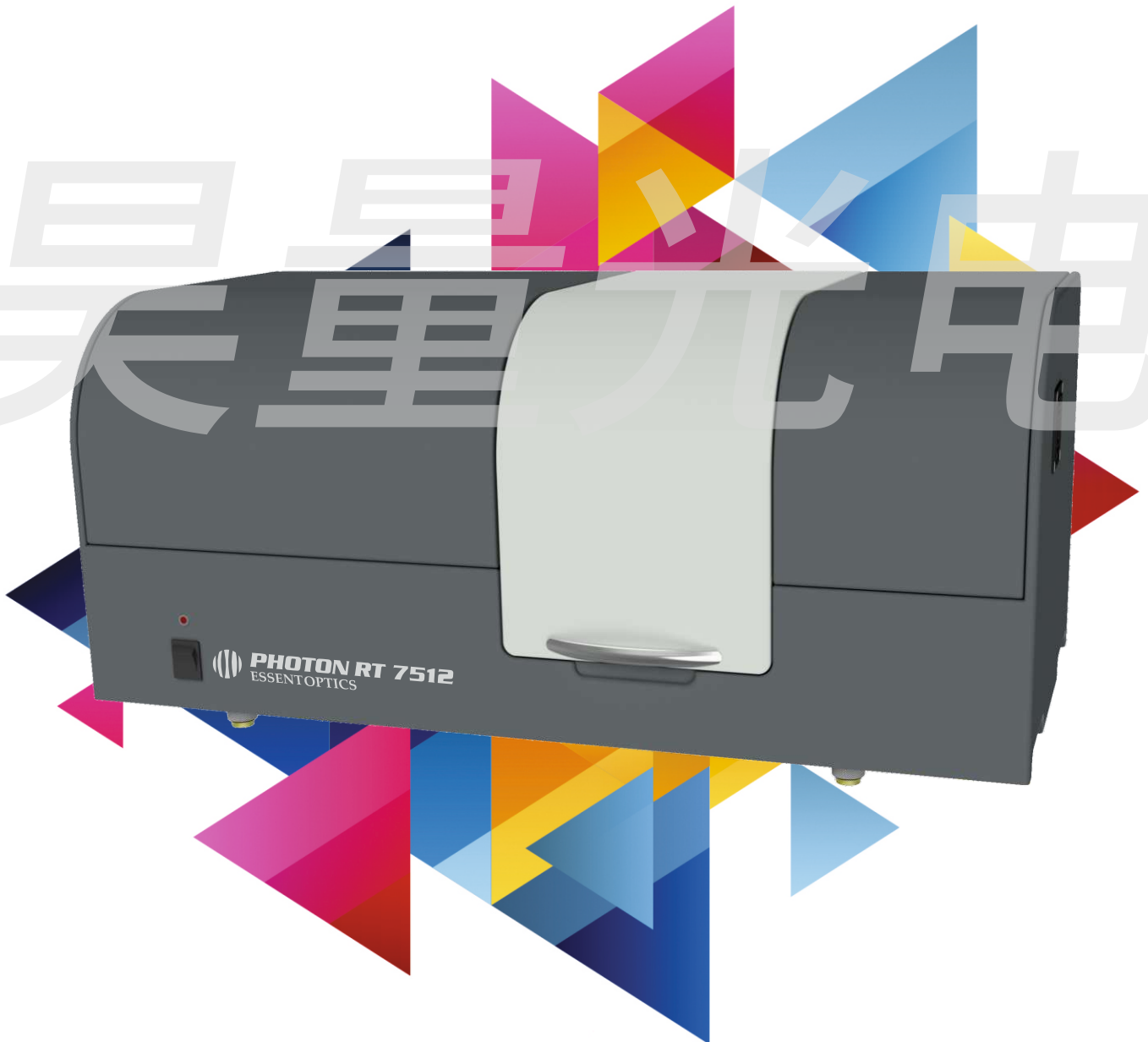


# ***PHOTON RT 7512***

LWIR SPECTRAL MEASUREMENTS OF PLANO OPTICS AND PRISMS



# SPECIFICATIONS

PARAMETER	DESCRIPTION
<b>MODEL</b>	<b>7512</b>
<b>OPTICAL CONFIGURATION</b>	
Photometric functions	%T, %R
Effective wavelength range, $\mu\text{m}$	7,5 - 12,5
Built-in polarizers, $\mu\text{m}$	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
<b>SAMPLE COMPARTMENT</b>	
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
<b>INTERFACE, DIMENSIONS AND WEIGHT</b>	
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