Apochromatic Lens OB V-SWIR 16/1.6 – P/N C1326

General **Description**

A new high resolution V-SWIR apochromatic lenses image from 0.4 - 1.7 µm making them especially well-suited for PCB inspection, special laser applications, surveillance & defense, alignment and tracking.

A high F/N and excellent transmission characteristics allow superior imaging in these wavelengths of interest.



Optical and mechanical parameters

Focal length	า	16 mm	N. of elements	9
Image forma	at (diagonal)	12.3 mm	Dimensions	Dia 40 x 105 mm
F.O.V. (diag	jonal)	±21 degrees	Weight	0.400 Kg
Max apertur <mark>e</mark>		F/N = 1.6	Options	
Object form <mark>at</mark>		N.A.		
Min working	distance	1000 mm	Motorized focus	Upon request
Zoom value		N.A.	Motorized iris	Upon request
Focus		Manual	Motorized zoom	N.A
Iris		Max F/N = 1.6	Other mount type	Upon request
		Min F/N = 11	Customization	Upon request

P/N	wavelength range	mount type	Note
C1326.001	400-1700 nm	C-Mount	-

Specification are subject to change without notice



TS Diff. Limit | TS 0.00 (deg) || TS 12.99 (deg) TS 18.37 (deg) TS 22.30 (deg) MTF, Field Curvature, Distortion and 1.0 0.9 Transmission from 400 to 1700 nm 0.8 OTF 0.7 The calculated MTF values are displayed the 0.6 Ψo 0.5 below and are verified at the maximum Modulus 0.4 0.3 F/N and the best focus plane. The colored 0.2 0.1 lines represent the F.O.V. starting from the Spatial Frequency in cycles per mm center (0%) to the corner (100%). Polychromatic Diffraction MTF OPTEC S.p.A. 07/05/2014 Data for 0.4000 to 1.7000 μm. Surface: Image prova.2.zmx Configuration 1 of 1 Field Curvature Distortion 1.000 [ransmission 0.500 0.000 0.40000 1.05000 1.70000 -0.2 Percent Millimeters Wavelength in um Transmission vs. Wavelength Field Curvature / F-Tan(Theta) Distortion OPTEC S.p.A. OPTEC S.p.A. 07/05/2014 Field Pos: 0.0000, 0.0000 deg Field is unpolarized. 07/05/2014 Maximum Field is 22.300 Degrees. Wavelengths: 1.050 1.700 0.400 1.300 1. prova.2.zmx Configuration 1 of prova.2.zmx nfiguration 1

Optical parameters for wavelength range 0.4 – 1.7 μm

Resolut <mark>ion</mark>	MTF > 40%@50lp/mm
Distorti <mark>on</mark>	< 5%
Average axial c <mark>hromatic aberration</mark>	0.018 mm

Glass Transmission without coating	> 80%
Antireflection Coating	R <u><</u> 1%
Vignetting	< 1%

Outline Dimensions & Technical Notes

All the dimensions are reported to help the customer, mainly to define the interface with the cameras. More details are available upon request and technical drawings are open for the customers and their needs.

