

# LENS OB-SPACE – F960/5.2

## GENERAL DESCRIPTION

THIS NEW GENERATION OF HIGH PERFORMING LENSES ARE REDESIGNING THE WORLD OF SPACE READY OPTICS AT A GLOBAL LEVEL, ENSURING DETAILS NEVER SEEN BEFORE, BOTH LOOKING AT INFINITY AND AT CLOSER WORKING DISTANCES.

INTERNAL RESEARCH HAS BROUGHT IN OUR PRODUCT PORTFOLIO SPACE COMPLIANT MATERIAL AND A NEW LIST OF RAD-HARD GLASSES, ALLOWING TO OUR OPTICAL DESIGNERS NEW DEGREES OF FREEDOM IN OBTAINING BLEEDING EDGE PERFORMING SYSTEMS.

ALL OUR LENSES ARE ASSEMBLED IN ISO5 ENVIRONMENT.

## LET US BE YOUR EYES IN THE SPACE!!!

<i>OPTICAL AND MECHANICAL PARAMETERS</i>			
FOCAL LENGTH@550NM	960MM	OPTICAL LAYOUT	CATADIOPTRIC
F/N	5.2	FOCUS	FIXED
IMAGE FORMAT	42.1MM	N. OF ELEMENTS	6
F.O.V.	±1.25°	WAVELENGTH RANGE	450-950NM
BACK FOCAL LENGTH	20MM	AR COATING	R<0.3%@450-1000NM
RESOLUTION	MTF>20% @100LP/MM	FLANGE FOCAL LENGTH	CUSTOMIZED
DISTORTION	<1%	DIMENSIONS	UPON REQUEST
VIGNETTING	<1%	WEIGHT	UPON REQUEST
WORKING DISTANCE RANGE	INFINITY – 20KM	QUALIFICATION LEVEL	NASA GEVS
AVERAGE TRANSMISSION	>90%	ATHERMALIZATION	-20°C /+60°C
RAD HARD	30KRAD	MOTORIZED FOCUS	UPON REQUEST
SUN EXCLUSION ANGLE	UPON REQUEST	OTHER MOUNT TYPE	UPON REQUEST
STRAY LIGHT	UPON REQUEST	CAMERA INTERFACE	CUSTOM DESIGN
		CUSTOMIZATION	UPON REQUEST

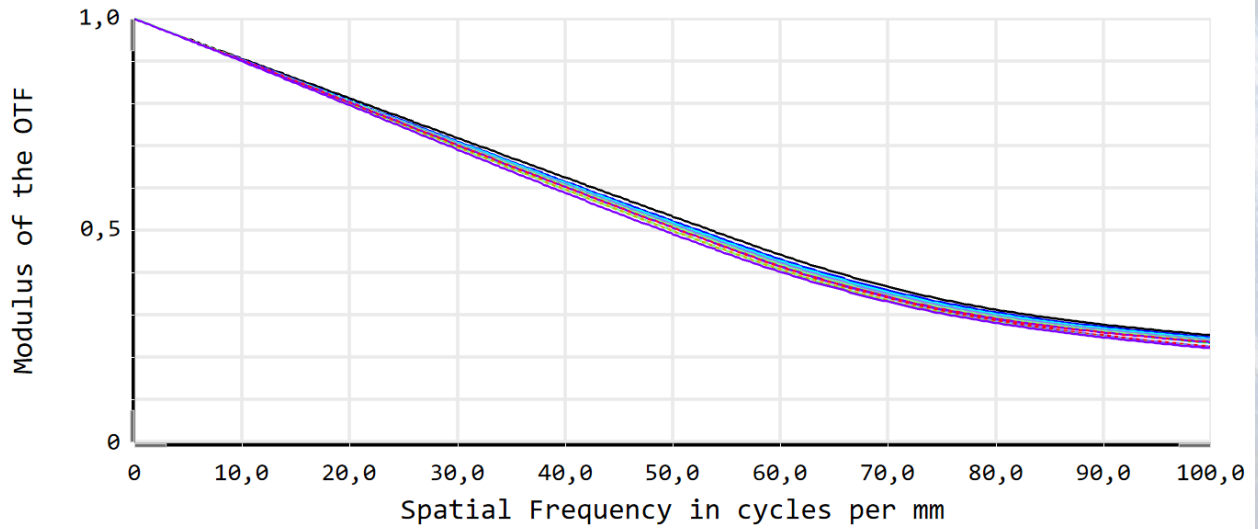
$$\text{Ground resolution} = \frac{WD \cdot \text{pixel\_size}}{\text{Focal length}}$$

$$\text{Area framed on the ground} = \frac{WD \cdot \text{sensor\_linear\_dimension}}{\text{Focal length}}$$

Where WD is the quote.

Specification are subject to change without notice

THE CALCULATED MTF VALUES ARE DISPLAYED BELOW AND ARE VERIFIED AT THE MAXIMUM F/N AND THE BEST FOCUS PLANE.  
THE COLORED LINES REPRESENT THE F.O.V. STARTING FROM THE CENTER (0%) TO THE CORNER (100%).



<input checked="" type="checkbox"/> Diff. Limit-Tangential	<input checked="" type="checkbox"/> Diff. Limit-Sagittal	<input checked="" type="checkbox"/> 0,0000, 0,0000 (deg)-Tangential	<input checked="" type="checkbox"/> 0,0000, 0,0000 (deg)-Sagittal
<input checked="" type="checkbox"/> 0,0000, 0,6250 (deg)-Tangential	<input checked="" type="checkbox"/> 0,0000, 0,6250 (deg)-Sagittal	<input checked="" type="checkbox"/> 0,0000, 0,8839 (deg)-Tangential	<input checked="" type="checkbox"/> 0,0000, 0,8839 (deg)-Sagittal
<input checked="" type="checkbox"/> 0,0000, 1,0825 (deg)-Tangential	<input checked="" type="checkbox"/> 0,0000, 1,0825 (deg)-Sagittal	<input checked="" type="checkbox"/> 0,0000, 1,2500 (deg)-Tangential	<input checked="" type="checkbox"/> 0,0000, 1,2500 (deg)-Sagittal
<input checked="" type="checkbox"/> 0,6250, 0,0000 (deg)-Tangential	<input checked="" type="checkbox"/> 0,6250, 0,0000 (deg)-Sagittal	<input checked="" type="checkbox"/> 0,8839, 0,0000 (deg)-Tangential	<input checked="" type="checkbox"/> 0,8839, 0,0000 (deg)-Sagittal
<input checked="" type="checkbox"/> 1,0825, 0,0000 (deg)-Tangential	<input checked="" type="checkbox"/> 1,0825, 0,0000 (deg)-Sagittal	<input checked="" type="checkbox"/> 1,2500, 0,0000 (deg)-Tangential	<input checked="" type="checkbox"/> 1,2500, 0,0000 (deg)-Sagittal
<input checked="" type="checkbox"/> -1,2500, 0,0000 (deg)-Tangential	<input checked="" type="checkbox"/> -1,2500, 0,0000 (deg)-Sagittal	<input checked="" type="checkbox"/> 0,0000, -1,2500 (deg)-Tangential	<input checked="" type="checkbox"/> 0,0000, -1,2500 (deg)-Sagittal

Polychromatic Diffraction MTF

07/08/2019  
Data for 0,5500 to 0,7500  $\mu\text{m}$ .  
Surface: Image (FP)

Legend items refer to Field positions

Optec S.p.A.  
Optical & Optoelectronic Systems

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Configuration 1 of 3

MORE DETAILS ARE AVAILABLE UPON REQUEST AND TECHNICAL DRAWINGS ARE OPEN FOR THE CUSTOMERS AND THEIR NEEDS.

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