## LENS OB-SPACE - F22.42/4

## **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!!!

OPTICAL AND MECHANICAL PARAMETERS			
FOCAL LENGTH@587NM	22.42 MM	OPTICAL LAYOUT	DIOPTRIC
F/N	4	Focus	FIXED
IMAGE FORMAT	28 MM	N. OF ELEMENTS	8 WITH 1 DOUBLET
		WAVELENGTH RANGE	450 ÷ 750nm
F.O.V.	± 32.5 DEGREE	AR COATING	R<0.3%@450-750nm
BACK FOCAL LENGTH	10.1	FLANGE FOCAL LENGTH	CUSTOMIZED
RESOLUTION	MTF<35%@90LP/MM	DIMENSIONS	90х52х72 мм
DISTORTION	<1%	WEIGHT	0,235 кд
VIGNETTING	<10%	QUALIFICATION LEVEL	NASA GEVS
WORKING DISTANCE RANGE	INFINITY - 50M	ATHERMALIZATION	-30°C/+75°C
AVERAGE TRANSMISSION	>90%	MOTORIZED FOCUS	UPON REQUEST
RAD HARD	30KRAD	OTHER MOUNT TYPE	UPON REQUEST
SUN EXCLUSION ANGLE	±40°	CAMERA INTERFACE	CUSTOM DESIGN
STRAY LIGHT	1*10 <sup>-5</sup>	CUSTOMIZATION	UPON REQUEST

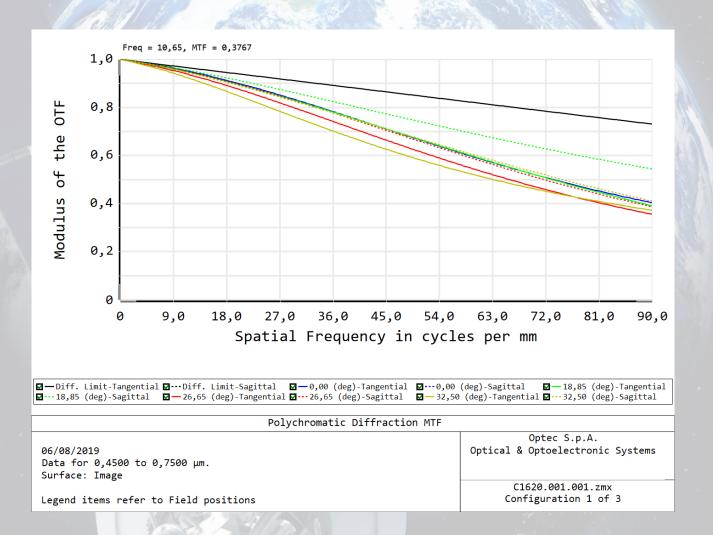
$$Ground\ resolution = \frac{WD \cdot pixel\_size}{Focal\ length}$$

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

Where WD is the quote.



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%).



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

