IRIX
SPACE OPTICS

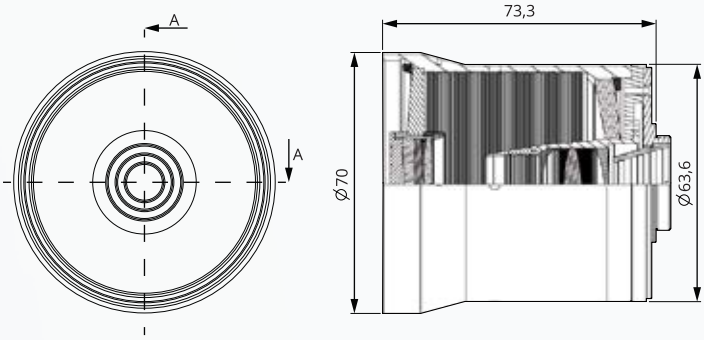
300 mm
SPACE READY

MAIN PROPERTIES	*Focal Length*	300 mm
	F-number	5.6
	Angle of view	~ 4,5°
	Camera mount	C-mount 1”/32 and others available on special request
EXTERNAL DIMENSIONS	*Total length*	75,5 mm
	Total weight	260g
	Total diameter	70 mm
TECHNICAL DATA	*Distortion aberration*	1%
	Sensor size	D ~ 14.26 mm
	Number of lenses (ASPH)	8 lenses
	*Temperature resistance**	-50°C to +150 °C
	*Resistance to mechanical vibrations**	5-100 Hz (2.5g) and 100-140 Hz (1.25g)

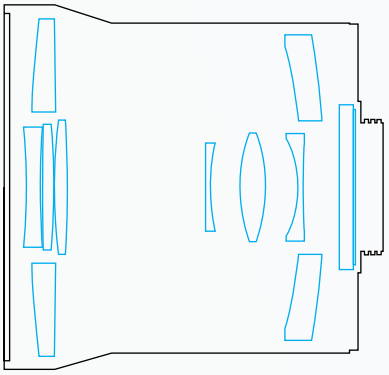
As a result of the optical resolution test of the laboratory model was obtained at the level of 853 LW /PH (MTF50).

The resolution measurements made before and after vibration test show that the lens components haven't been damaged and have not changed their positions.

EXTERNAL DIMENSIONS



OPTICAL LAYOUT

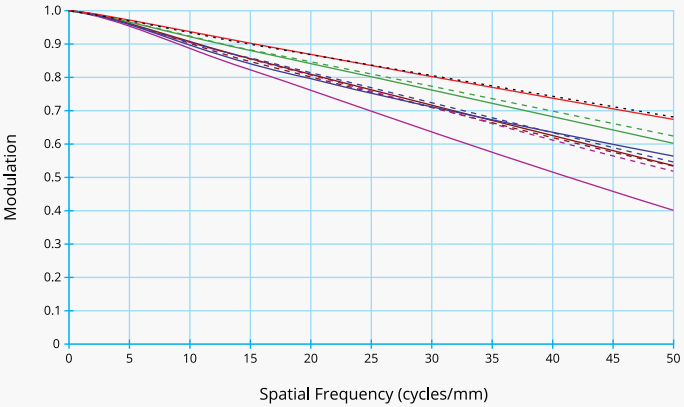


TECHNICAL DATA

Diffraction MTF

f=300mm F5.6 MIRROR

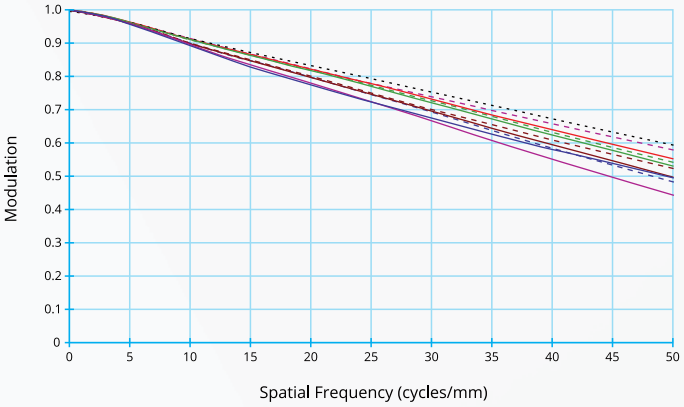
Infinity



Diffraction MTF

f=300mm F5.6 MIRROR

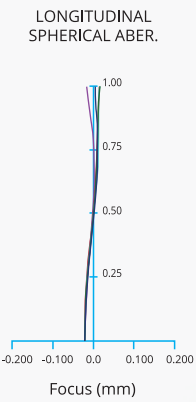
5077 mm

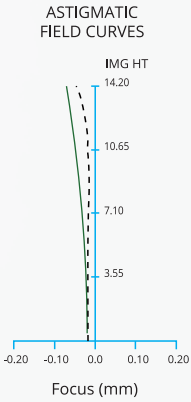


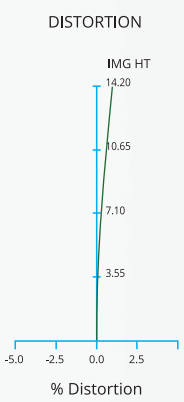
- F1: Diff. Limit
- F1: (RIH) 0.000 mm
- F2: T (RIH) 4.000 mm
- F2: R (RIH) 4.000 mm
- F3: T (RIH) 8.000 mm
- F3: R (RIH) 8.000 mm
- F4: T (RIH) 12.000 mm
- F4: R (RIH) 12.000 mm
- F5: T (RIH) 14.200 mm
- F5: R (RIH) 14.200 mm

Astigmatism

Infinity

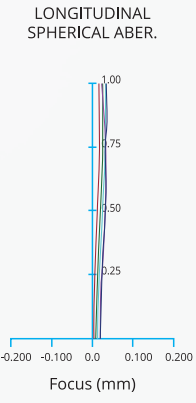


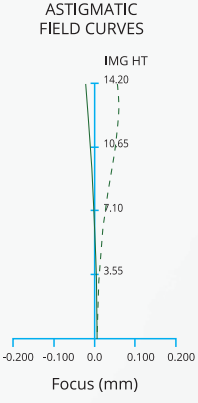


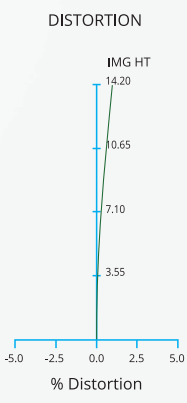


Astigmatism

5077 mm



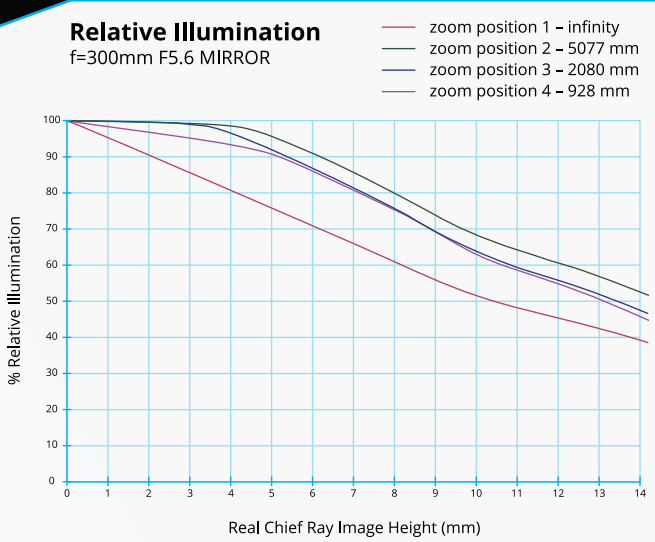




656.2700 NM
587.5600 NM
546.0900 NM
479.9100 NM
435.8300 NM

VIGNETTING

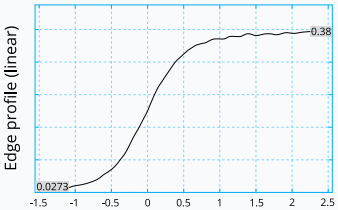
Relative Illumination
f=300mm F5.6 MIRROR

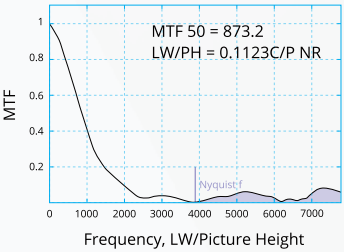


VIBRATION TEST

FREQUENCY (Hz)	AMPLITUDE (g^2/Hz)
20	0,057
153	0,057
190	0,099
250	0,099
750	0,055
2000	0,018
g_{RMS}	9,47

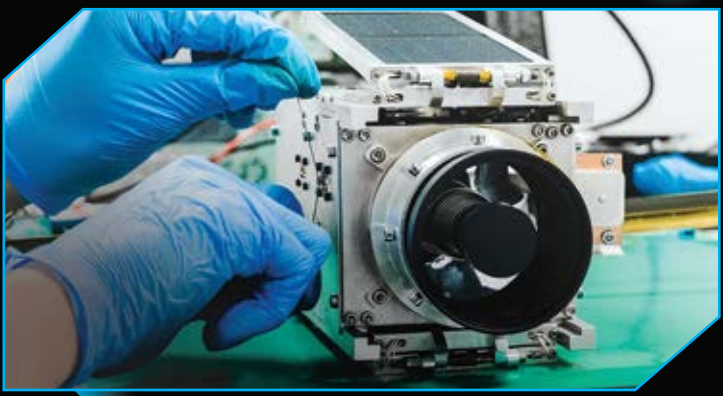
Laboratory model vibration test and a table with the ranges and amplitudes of vibrations.





	OPTICAL RESOLUTION MTF50
Measurement before vibration test	864,2 LW/PH
Measurement after vibration test	864,7 LW/PH

Lens stabilization in the nanosatellite body.



The Irix 300SR lens complies
with the requirements of Nasa Standard Materials
and Processes Requirements for Spacecraft.

Contact us
for more information.

space.irixlens.com

* SatRevolution - test results