

## PRELIMINARY TECHNICAL LEAFLET

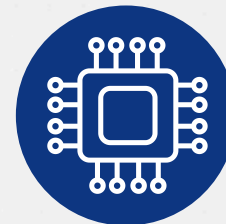
### Embedded Deformable Mirror



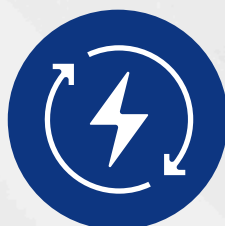
#### Key features



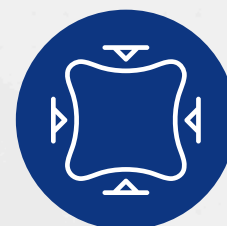
**COST EFFICIENT**



**NO EXTERNAL  
ELECTRONICS**



**LESS ENERGY  
NEEDED**



**LOW SWAP**

## Preliminary Technical Specifications

Number of actuators	97
Pupil diameter (mm)	13.5
Pitch (mm)	1.5
Active best flat (nm RMS, mechanical)max	7
Tip/Tilt stroke ( $\mu\text{m}$ PV, wavefront)min	$\pm 60$
Defocus/Astig stroke ( $\mu\text{m}$ PV, wavefront)min	$\pm 40$
3x3 stroke ( $\mu\text{m}$ PV, wavefront)min	$\pm 25$
Settling time (ms at $\pm 10\%$ , any stroke) max	0.8
First resonance of the membrane (Hz)min	800
Non-linearity (%)max / Hysteresis (%)max	3 / 2
Functional temperature ( $^{\circ}\text{C}$ )	-50 to 50
Mechanical W x H x D (mm)	51,50 x 74 x 53

## Our Company

Since 2008, Bertin Alpao designs and manufactures a complete range of adaptive optics products for use in research and industry. Bertin Alpao understands your needs and provides you with the best solutions: deformable mirrors, wavefront sensors and software for your application. Our products are tailor-made for various applications such as astronomy, ophthalmology, microscopy, optical and quantum communications, space and laser applications.