

**MD-AME Space mirrors use  $\mu$ AME-Space\* actuators for wave-front correction: the optical surface keeps its shape even when the system is unpowered.**



- Improves imaging quality of spatial telescopes
- Very high long-term stability unpowered
- Low voltage power supply: 24V
- High redundancy thanks to its design
- Correction possible with lost actuators.
- Low hysteresis ( < 0.1%)
- Very low energy consumption
- Allows a reduction of optics manufacturing constraints
- Space qualified (embedded in satellites)
- Large correction amplitude

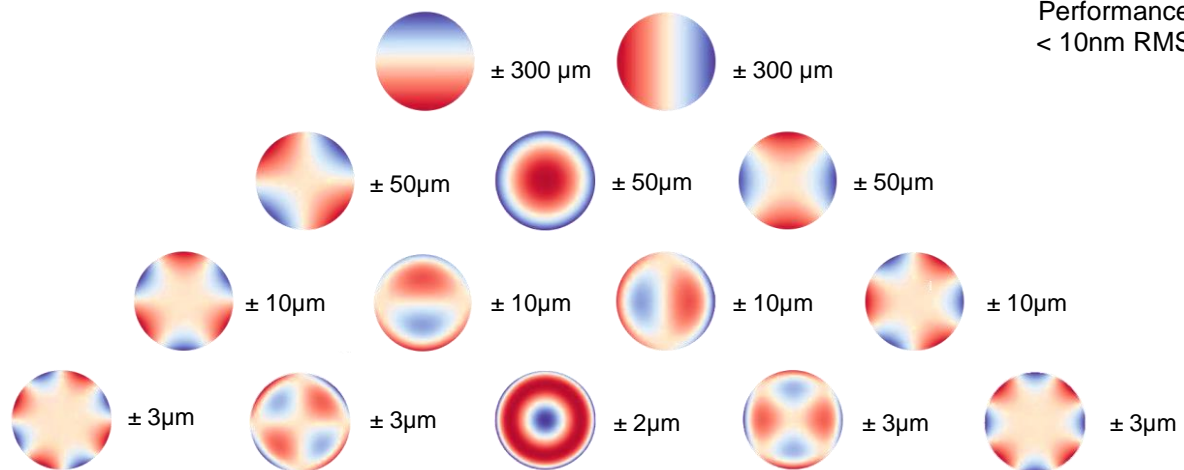
*\* $\mu$ AME : Micro Strength Actuator patented by ISP System*



## Example Features : MD85-C-31-SPACE

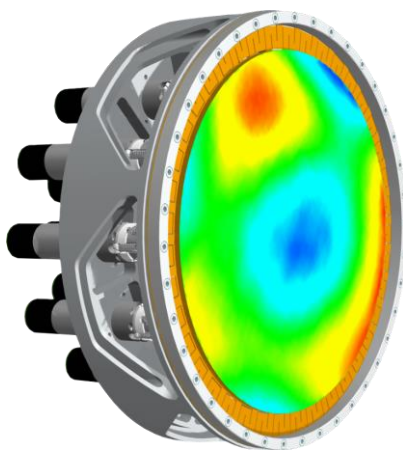
- Working pupil : Diameter 85 mm
- Metallic coating
- 31 actuators ( $\mu$ -AME12-Space)
- Zernike order 4
- Size  $\varnothing 180 \times 100$ mm (excluding connectors)
- Weight 4kg

Zernike modes dynamics achievable, Peak to Valley (PtV)



PtV dynamics are related to a diameter 85mm circular aperture. Depending on the modes, the rms residual wave-front errors represent between 0.1% and 1% of the correction.

## Custom solutions



Thanks to its experience and skills, ISP System offers services to design custom solutions in order to meet your requirements. The main customizable features are :

- Actuators quantity and Pattern
- Achievable Zernike modes dynamics and order
- Aperture size and angle of incidence, from  $0^\circ$  to  $45^\circ$
- Optical surface coating (wavelength, damage threshold, reflectivity...)
- Redundant Windings

