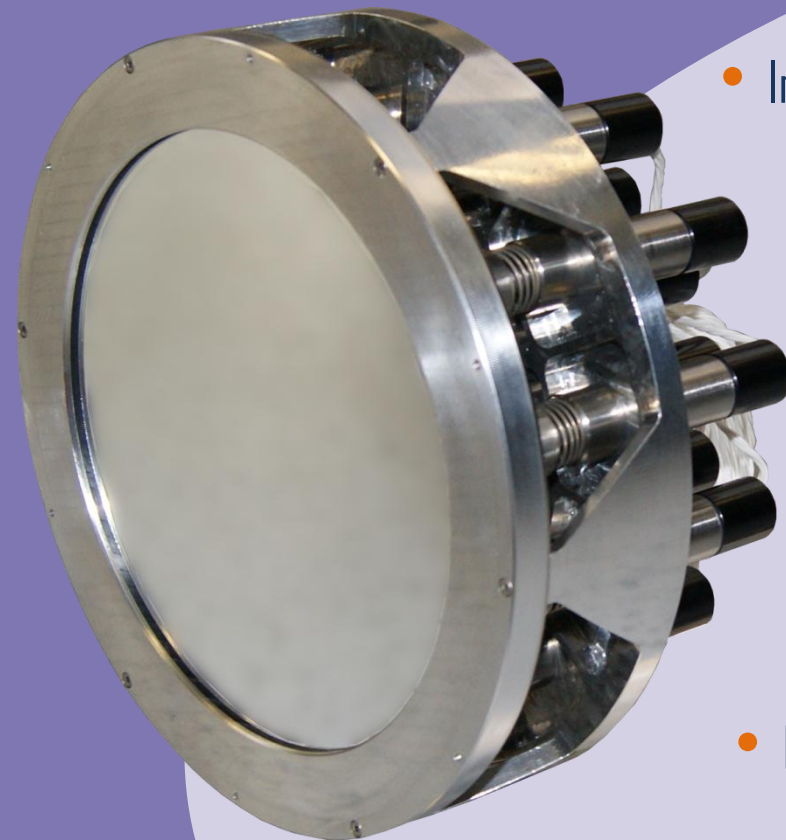


MD-AME SPACE

**Deformable Mirror
dedicated to
wavefront correction
in Space applications**

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

μ AME*: Micro Strength Actuator patented by ISP System



- 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



Custom deformable mirror on request : contact@isp-system.fr

Example Features: MD85-C-31-SPACE

Working pupil : Diameter 85 mm

Metallic coating

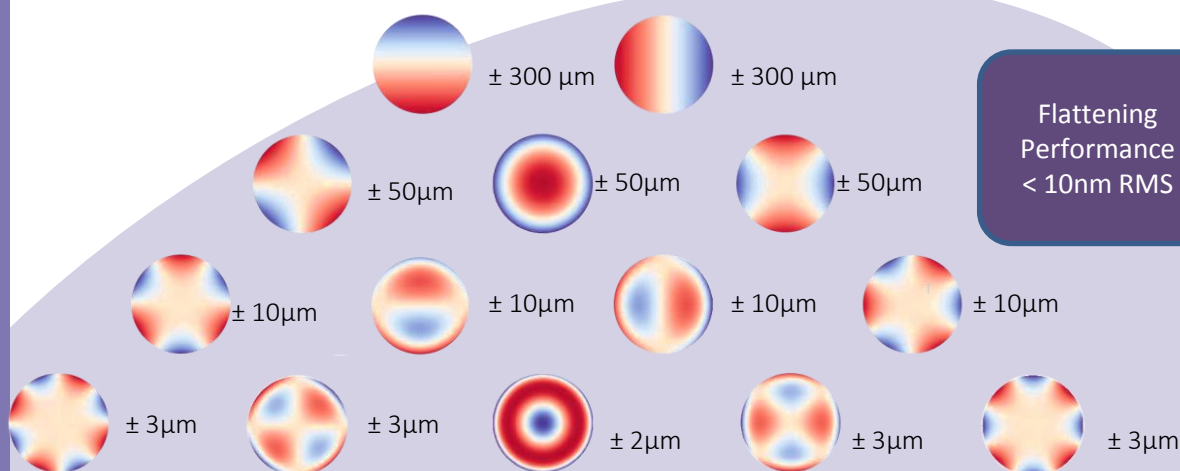
31 actuators (μ -AME12-Space)

Zernike order 4

Size \varnothing 180 x 100mm (excluding connectors)

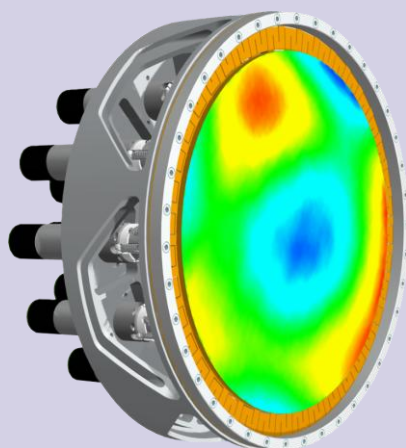
Weight 4kg

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° to 45°
- Optical surface coating (wavelength, damage threshold, reflectivity...)
- Redundant Windings

