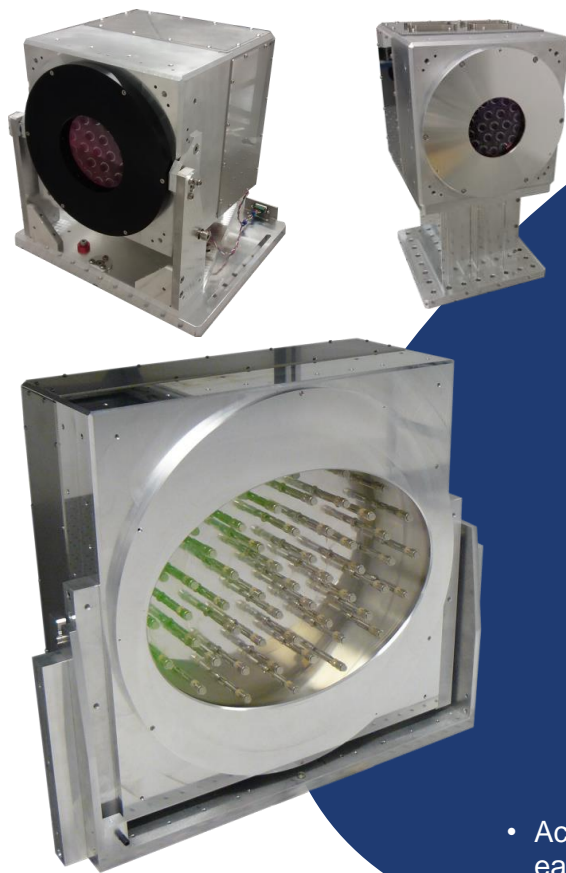


MD-AME mirrors use μ AME-ST* actuators for wave-front correction: the optical surface keeps its shape even when the system is unpowered, no print through effect (actuator mark) on the optical surface.



- No print-through effect on the optical surface
- High long-term stability unpowered
- Correction possible during laser shot
- Low hysteresis (< 0.1%)
- Excellent linearity (> 99%)
- Possibility of fast actuation strategy
- Large correction amplitude
- Excellent resistance to electromagnetic disturbance
- Actuators and optical surface are easily exchangeable

- Working pupil : From \varnothing 22mm up to \varnothing 800mm, circular or square, any angle of incidence
- Dielectric, metallic or hybrid coating (high LIDT, large bandwidth)
- Actuators quantity adjusted for each application
- High Zernike order correction
- Compatible with any wave-front sensor technology
- Motorized Gimbal Tip-Tilt mount available
- Compatible with Windows and Linux environment

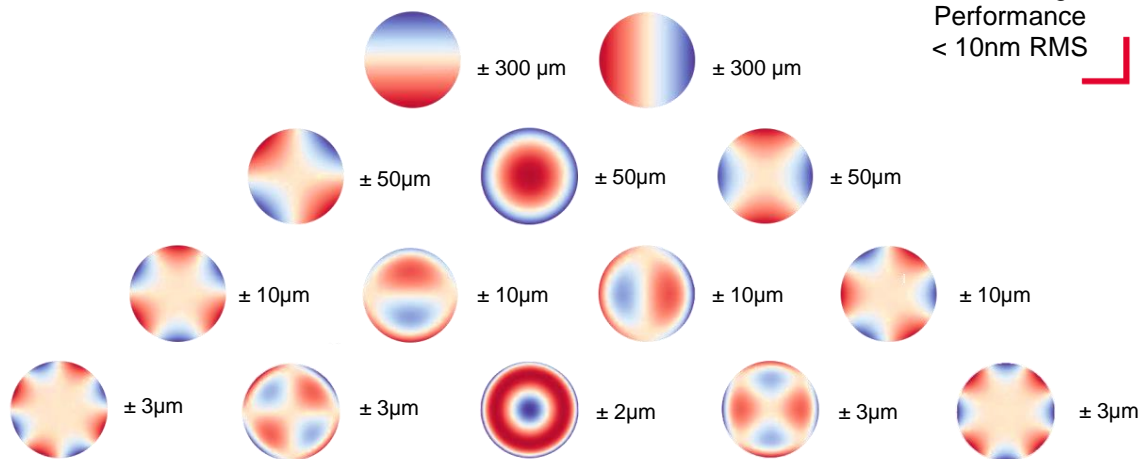
* μ AME-ST : Micro Strength Actuator driven by stepper motors, patented by ISP System⁽¹⁾
⁽¹⁾ISP SYSTEM'S patents : EP1925959 A1 and FR2981139 A1

Adaptive optics loop

MD-AME deformable mirror can be interfaced with any wave-front sensor technology (Shack Hartmann, Lateral Shearing Interferometry). ISP SYSTEM advises and supports the customers on the integration of deformable mirror in adaptive optics loop system.

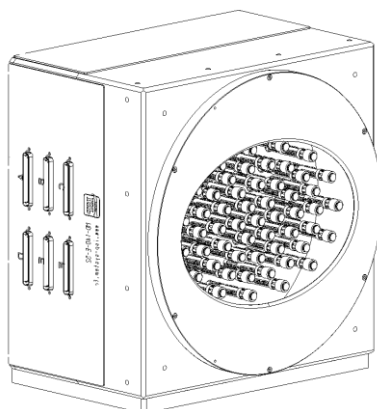
ISP SYSTEM proposes dedicated and adapted solutions for intense laser facilities. These solutions have shown their efficiency and their stability on many laser facilities worldwide.

Zernike modes dynamics achievable, Peak to Valley (PtV)



PtV dynamics are related to a diameter 80mm circular aperture with 35 actuators.

Custom solutions



Thanks to its experience and skills, ISP System offers services to design custom solutions in order to fit your needs.

The main customizable features are:

- UHV compatibility
- Active or passive cooling
- Actuators quantity
- Zernike modes dynamics and achievable order
- Aperture size and angle of incidence
- Control strategy
- Environment compatibility (embedded, space, ...)
- Software environment (Windows, Linux, ...)
- Optical surface coating (wavelength, damage threshold, reflectivity...)