

# Monomorph Deformable Mirrors for Astronomy and Optical telecommunications

Ensuring the highest wavefront correction performances, CILAS monomorph mirrors are perfectly suited for both astronomy and optical telecommunications needs. CILAS monomorph mirrors lean on a 20-year return of experience from the major night and solar ground-based telescopes while increasing both performances and reliability.

A team of experts is at your service to define, customize, and manufacture the most appropriate deformable mirrors to your specific correction needs.

## Major references for astronomy

PUEO system of the Canada France Hawaii Telescope (1996)
Very Large Telescope Interferometer of ESO
AO188 of the Subaru Telescope
AO85 of the 1-meter Swedish Solar Telescope



Credit CNIS - Illustration David Ducros

Credit: ESO

## ■ DESIGN

- Pupil diameter : from Ø25 mm to Ø150 mm
- Number of cells: from 30 to 250
- Electrode pitch: from 3 mm to 10 mm
- Mirror weight: ~1 kg

## ■ TYPICAL PERFORMANCES

- Maximum stroke: ±100 µm PtV wavefront
- Interactuator stroke: ±2 to 5 µm PtV wavefront
- Bandwidth from 500 Hz to a few kHz
- No print-through effect
- No heat dissipation

## ■ OPTICAL FEATURES

- Optical quality < 10 nm RMS wavefront
- Coating: protected silver and aluminum coatings
- Other coatings available upon request and on [www.cilas.com](http://www.cilas.com)

## ■ ENVIRONMENT

- Compatible with night and solar telescopes environmental conditions

## ■ ELECTRONIC DRIVER

- Analog electronic drivers are supplied with deformable mirrors

For more information, please contact:  
+33 4 42 36 97 00 or [optics@cilas.com](mailto:optics@cilas.com)

SIÈGE SOCIAL  
8, AVENUE BUFFON - CS 16319  
45 063 ORLEANS CEDEX 2 - FRANCE  
[www.cilas.com](http://www.cilas.com)

SITE D'AUBAGNE  
600 AVENUE DE LA ROCHE FOURCADE  
PÔLE ALPHA SUD-SAINT MITRE  
13 400 AUBAGNE - FRANCE