

Iris AO, Inc.

AO ENGINE SPECIFICATIONS

- ✓ Deformable Mirror: 111 and 489 actuator, 5 μ m stroke
- ✓ Wavefront Sensor: Shack Hartmann matched 1:1 to DM
- ✓ Camera Sample Rate: 60 Hz
- ✓ Camera Dynamic Range: 10 bit
- ✓ Wavefront Resolution: < 15 nm *rms*
- ✓ Wavefront Dynamic Range: \pm 14 mrad
- ✓ AO Controller: Zernike-based modal controller
- ✓ Maximum Operating Temperature: 50°C
- ✓ User Interfaces: AO Engine Workbench GUI, AO Engine console application
- ✓ C/C++ libraries for custom applications and development

ADAPTIVE OPTICS MADE EASY

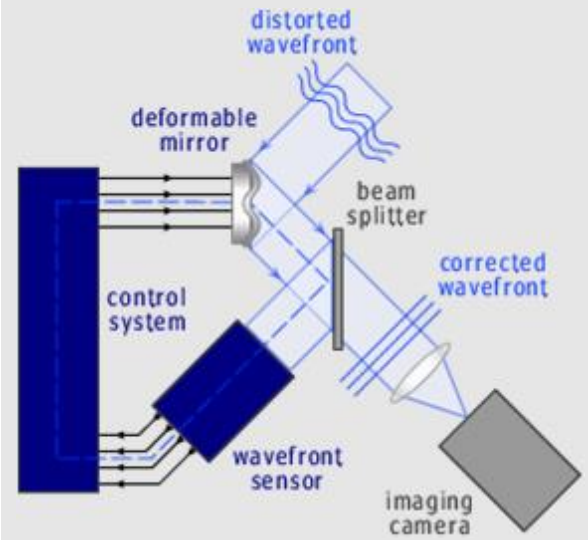
The AO Engine is a high-performance adaptive-optics (AO) control system designed to integrate into your optical systems. This turn-key solution provides all of the functionality needed to bring AO to your optical system. Our robust modal-based controller has been demonstrated in many diverse applications ranging from retinal imaging to laser-beam correction. The intuitive workbench graphical user interface is easy to learn and provides powerful real-time feedback to monitor AO system operation.

SCIENCE GRADE COMPONENTS

The AO Engine comes equipped with high-performance components. It is suitable even in low-light level applications such as AO retinal imaging at up to 60 Hz sample rates. The robust controller smoothly handles variations in pupil sizes and wavefront-sensor spot drop outs.

PROVEN PERFORMANCE

The AO Engine has been an invaluable tool for leading vision-science researchers and as a hands-on laboratory demonstration system for optics educators for years. Let Iris AO provide an AO solution for your imaging, microscopy, academic, or industrial needs.



SYSTEM CONTENTS

- ✓ PTT111-5 DM system, 5 μ m stroke, 111-actuator DM and electronics
- ✓ Shack-Hartmann wavefront sensor
- ✓ Control computer
- ✓ AO Engine Workbench GUI
- ✓ AO Engine console application

SYSTEM OPTIONS

- ✓ 5 μ m stroke DM
- ✓ PTT489: 489 actuator DM
- ✓ 60 Hz High-sensitivity camera for retinal imaging and biological imaging