

FEATURES

- Multiple Computer Interfaces Available
 - CameraLink (100,000 Hz commands)
 - LVDS Digital (10,000 Hz commands)
 - Ethernet (>100 Hz commands)
 - Coming Soon: CXP and Fiber
- Up to 120V output with 16-bit DACs
- Up to 384 Channels in one 3U rack-mount package
- Internal Power Supply
- Controller designed to drive a 250nF load
- MIL Standard Micro-D connectors
- Microsoft Windows operating system basic software package and external interface provided
- Compatible with the AOS Adaptive Optics Software Customizable with multiple configurations. Example

APPLICATIONS

- Deformable Mirrors
- FSM Controller
- PZT Actuators
- Alignment Controller
- Track Controller

DESCRIPTION

This controller package provides a CameraLink, Ethernet, or LVDS interface from a control system to many actuators requiring high voltage and higher current like piezoelectric or electrostrictive actuators. The controllers consist of a single interface board and up to twelve 32-channel driver boards for a maximum of 384 channels in each unit. More channels can be added by adding additional boxes which are connected to a common trigger line. Each 32-channel drive electronics board has 16-bit digital resolution DACs. The controller can also be configured to control a DM and FSM in the same chassis.

384 Channel DM Controller



Combined AO & Tracking Controller



Specifications

Specification	Typical Value
Maximum Voltage	120V
Rise Time	Typically 0.12 V/ μ s with 0.2 μ F Load (adjustable)
Digital Latency	10 μ s (LVDS or CameraLink)
Computer Interface	LVDS or Ethernet
DAC Bits	16
Maximum Channels at Max Speed	384 per box, Common Trigger Capable
Maximum Update Rate	>100kHz (CameraLink) >10kHz (LVDS)
Package Size	3U Rack Mount 17.5L x 17.5W x 5.5H inches
Features	Compatible with AOS Adaptive Optics Software
Starting Price (32-Channels)	\$25,000