

FEATURES

- Multiple Interfaces Available:
 - CXP
 - Camera Link
 - Fiber (Full-Duplex)
 - LVDS Digital
 - Ethernet
- Up to 120V output with 16-bit DACs
- Up to 384 Channels in a single 3U rack-mount package
- Internal Power Supply
- MIL Standard Micro-D connectors
- Compatible with the AOS Adaptive Optics Software
- Compact & Customizable Packaging (SWAP-C2)
- Ruggedized options

AOS 3U Controller

(384 Channel DM Option)



APPLICATIONS

- **AOS Component and AO Systems:** AOS electronics and controllers serve as the command units for our components and systems.



Compact Controllers

(64 Channel Option)

DESCRIPTION

AOS electronics and controllers are designed to optimize component performance and overall system efficiency. Controllers are capable of seamlessly pairing multicomponent command, providing a dramatic improvement to industry beam control systems. Single ruggedized AOS Controllers can control multiple components, immediately reducing system Size, Weight, Power, Cost, and Cooling (SWAP-C2) considerations—an industry-wide priority.

AOS produces high-power drive electronic controllers to command our Plate-Type DM (PDM) product line. AOS can integrate the controller into standard rack mountable 3U chassis with a LVDS/Ethernet, Camera Link, fiber or CXP interface. PDM controllers start at 32 channels and are expandable up to 384 channels within a single controller chassis. AOS builds multiple correlated controllers for DMs larger than 384 channels, allowing for unlimited channel count. AOS can also integrate controllers into ruggedized or compact packaging to satisfy performance, size, weight or cooling requirements.

CONTROLLER SPECIFICATIONS

Parameter	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)
DAC Bits	16
Maximum Channels at Max Speed	384 per box, Common Trigger Capable, Can be daisy-chained with additional controllers for unlimited channel count
Command Interfaces	<ul style="list-style-type: none"> Fiber: >95kHz LVDS: >10kHz Ethernet: >1kHz
Image Interfaces	<ul style="list-style-type: none"> CXP: 225kHz CameraLink: 100kHz
Package Sizes	<ul style="list-style-type: none"> 3U Chassis: 17.5L x 17.5W x 5.5H inches Compact, Custom & Ruggedized Options
Features	Compatible with AOS Adaptive Optics Software. Built-in component protection via inter-actuator stroke limiting



***6"x4"x2" AOS Custom Ruggedized DM Controller
designed for SWAP-C2 considerations***