

Electronics & Controllers

FEATURES

- Multiple Computer Interfaces Available:
 - Camera Link (100,000 Hz commands)
 - LVDS Digital (10,000 Hz commands)
 - Ethernet (>100 Hz commands)
 - Fiber
 - CXP
- Up to 120V output with 16-bit DACs
- Up to 384 Channels in one 3U rack-mount package
- Internal Power Supply
- MIL Standard Micro-D connectors
- Compatible with the AOS Adaptive Optics Software
- Customizable Packaging (SWAP-C2)
- Ruggedized options

APPLICATIONS

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

AOS 3U Controllers

(384 Channel DM Options Shown)





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. AOS can also integrate controllers into ruggedized or compact packaging to satisfy performance, size, weight or cooling requirements.











Electronics & Controllers

3U CONTROLLER SPECIFICATIONS

Parameter	Value
Maximum Voltage	120V
Rise Time	Typically 0.12 V/μs with 0.2 μF Load (adjustable)
Digital Latency	10 μs (LVDS or CameraLink)
Computer Interface	LVDS or Ethernet
DAC Bits	16
Maximum Channels at Max Speed	384 per box, Common Trigger Capable
	>100kHz (CameraLink)
Maximum Update Rate	>10kHz (LVDS)
	>1kHz (Ethernet)
	>100kHz (CameraLink)
Maximum Update Rate	>10kHz (LVDS)
	>1kHz (Ethernet)
Package Size	3U Rack Mount
	17.5L x 17.5W x 5.5H inches
Features	Compatible with AOS Adaptive Optics Software



8"x6"x4" AOS Custom Ruggedized DM Controller designed for SWAP-C2 considerations







