

## X-Driver

*Upgrade available for our Mini-DM and Multi-DM*

For low latency and high-speed, sending commands at 50x the rate of our standard driver (400 kHz), this driver exceeds the response time of our deformable mirror technology.



## Specifications

- DIO Interface: Camera Link via PCIe interface card
- # Parallel HV output channels: 32 or 140
- Maximum Output Voltage: 300V
- HV Interface: 37-Pin D-Sub Connector (4X)
- Resolution: 14-bit
- Voltage Step Size: 18 mV
- Latency †: <math><4\mu\text{s}</math>
- Maximum Frame Rate: 400 kHz
- External Power Supply: 24 V DC, 2.5A
- Size(WxDxH): 7.2" x 7.1" x 2.5"

† Latency defined as 1<sup>st</sup> word generated to last DAC updated

## Kilo-LL (Low Latency)

*Upgrade available for our 492-DM and Kilo-DM*

Updates mirror actuators at twice the rate of our standard driver. For demanding applications and reduced latency.

### Specifications

- DIO interface: 32 bit- LVDS (200 MB/s) or SFP fiber link (2.5 Gbps)
- Interface HV: 4x300pin Megarray (1024 channel)
- Form Factor: 3U Chassis (5.25" x 19" x 14")
- Latency †: 17µs
- Maximum Frame Rate: 60 kHz
- Cross-talk: <1% peak amplitude
- Power Draw: 40W
- Current Output: 0.7 mA max
- Maximum Output Voltage: 295V
- Resolution: 14-bit
- Power Supply type/location: HV & LV supplies reside inside driver chassis
- Mirror Protection: Default to 0V when driver is not being controlled
- # Channels per board: 256
- HV Line Capacitance: 300 pF



## S-Driver

*Upgrade available for our 492-DM, Kilo-DM and 2K-DM*

Operates over a reduced range for fast, repeatable performance and an increase in frame rate.

### Specifications

- DIO interface: SFP fiber link (2.5 Gbps)
- Latency † : 22.7 µsec
- Maximum Frame Rate: 60 kHz
- Resolution: 12 Bit
- Average Voltage Step Size: 14 mV
- Dimensions: 3.5" x 19 x 14" (3U Chassis for 19" Rack)
- Power Requirements: 120/240V AC, 1A

† Latency defined as 1<sup>st</sup> word generated to last DAC updated

