

# MATROX® VIDEO VIDEO WALL PRODUCTS



## Matrox® LUMA Pro Series

### Drive 8K HDR IP-Based Video Walls with Extraordinary Performance

Drive up to four 8K displays or up to eight synchronized 5K displays or projectors from a single Matrox® LUMA Pro Series graphics card. Designed and built for reliability, stability, and ease of deployment, these PCI Express® 4.0 boards are ideal for powering demanding IP-based video wall systems and digital signage applications in commercial and critical environments. OEMs, system integrators, AV installers, and developers can also benefit from a complete range of software, APIs, SDKs, and libraries to create custom control functions and applications for any multi-display installation. TAA-compliant SKUs are available. Matrox LUMA Pro Series is powered by Intel® Arc™ graphics.

## Key features and benefits

<b>8Kp60 HDR support</b>	Be 8K HDR ready and power up to two synchronized high-resolution displays from a single LUMA Pro A310/A380 Quad card—or drive up to four 8k displays with the LUMA Pro A380 Octal card.
<b>5K resolution support</b>	Power up to two 5Kp120 or four 5Kp60 displays from a single LUMA Pro Quad Series board. Double the number of displays with the LUMA Pro A380 Octal card.
<b>DisplayPort™2.0</b>	Deliver the best display density, resolution, and performance for demanding multi-monitor applications with PCIe® 4.0 cards featuring Mini DisplayPorts or DisplayPorts.
<b>Synchronized video outputs</b>	Drive up to sixteen synchronized 5K displays and reduce tearing by framelocking up to four LUMA Pro A310/A380 Quad or two LUMA Pro A380 Octal cards with the included board-to-board framelock cables—and save slot space as a separate card isn't needed for the synchronization. Option to drive up to 64 Full HD displays by pairing Matrox LUMA Series with Matrox QuadHead2Go.
<b>HDCP compliant</b>	Display protected content, or capture and display protected content, when paired with Matrox Mura HDMI and Mura C4K Series capture cards.
<b>Low-profile form factor</b>	Install low-profile LUMA Pro A310 Quad cards in a wide range of small form factor and standard-height systems, and use only a single slot—thanks to their low-profile design.
<b>Long product lifecycle and dedicated support</b>	Benefit from a product longevity of seven years and dedicated customer support. Your product carries a three-year warranty and has an available extended warranty to ensure maximum protection.
<b>Custom control</b>	Manage your video walls with the intuitive Matrox MuraControl™ software or develop custom functions and applications for any video wall installation using the complete range of APIs, SDKs, and libraries.
<b>TAA compliant SKU available</b>	Integrated design, engineering, and manufacturing based in a TAA-designated country for guaranteed quality and reliability.

## DisplayPort boards to drive powerful IP-based video walls



**LUMA Pro A310 Quad**

Low-profile PCIe® Gen4 x16 (x8 electrical) quad-output graphics card delivers increased performance for small form factor systems.



**LUMA Pro A380 Quad**

Standard height single slot PCIe® Gen4x 16 (x8 electrical) quad-output graphics card delivers the best display density, resolution, and performance for demanding multi-monitor applications.



**LUMA Pro A380 Octal**

Standard height single slot PCIe Gen4 x16 eight-output graphics card with 12GB of memory delivers extreme performance for multi-display applications.

## Applications



Retail



Education



Industrial



Commercial Gaming



Healthcare



Transportation

# Matrox PowerDesk software and API

Leverage the stability of PowerDesk software to quickly configure enterprise-wide multi-monitor deployments. PowerDesk offers a comprehensive set of tools to easily deploy and control a variety of display configurations. Create your custom multi-monitor desktop/output management software with the PowerDesk API.



Stretched Desktop



Bezel Management



Independent Desktop



Pivot Mode



Clone Mode

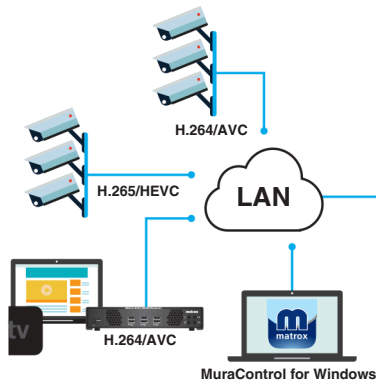


EDID Management



Edge Overlap

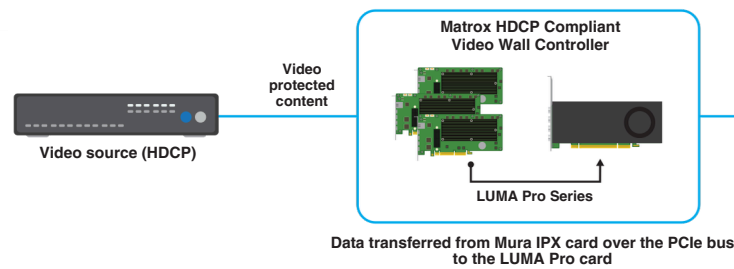
## Workflows



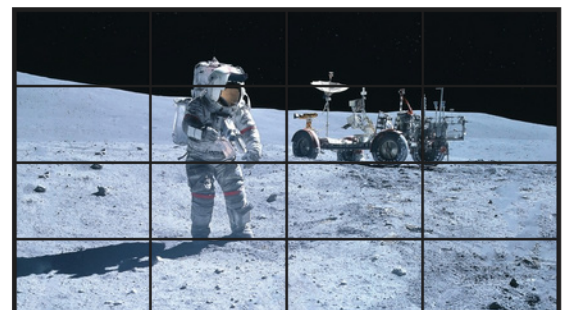
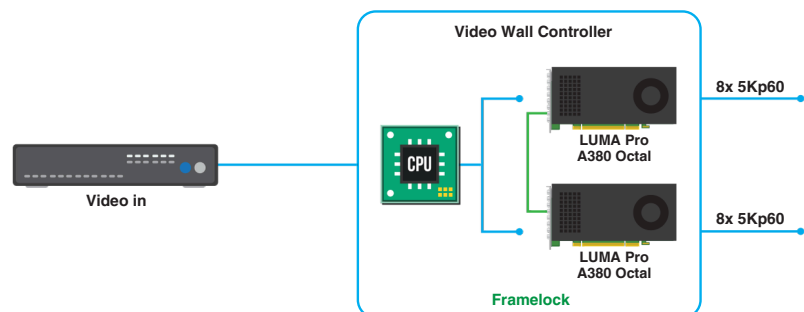
### IP-based video wall



### HDCP workflow



### 2 boards video wall



# Technical specifications

Product	LUMAProA310 Quad	LUMA Pro A380 Quad	LUMA Pro A380 Octal
Part number	LUMA-A310FP	LUMA-A380P	LUMA-A380P8
Bus type	PCIe 4.0 x16 (x8 electrical)	PCIe 4.0 x16 (x8 electrical)	PCIe 4.0 x16
Number of video outputs	4	4	8
Video output connectors	4x Mini DisplayPort (secure)	4x DisplayPort	8x Mini DisplayPort (secure)
DisplayPort specification	2.0 UHBR10	2.0 UHBR10	2.0 UHBR10
Maximum number of cards in a system	4	4	2
<b>Performance</b>			
<b>Maximum resolution</b>			
	2x 8K60/5K120 or 4x 5K60 HDR 12b	2x 8K60/5K120 or 4x 5K60 HDR 12b	4x 8K60/5K120 or 8x 5K60 HDR 12b
Bit depth and color space	<ul style="list-style-type: none"> <li>• Up to 36 bpp (Bits per Pixel)</li> <li>• YCbCR 4:4:4</li> <li>• YCbCR 4:2:0</li> <li>• RGB</li> </ul>		
Memory	4GB GDDR6	6GB GDDR6	12GB GDDR6
GPU	Intel® Arc™ A310E	Intel® Arc™ A380E	2x Intel® Arc™ A380E
Multi-stream audio	High-definition audio streams on four digital ports simultaneously		
<b>Additional features</b>			
DisplayPort features	VESA DSC 1.1, and Adaptive Sync		
HDCP compliance	2.3	2.3	2.3
Board-to-board framelock	Max of 4 cards	Max of 4 cards	Max of 2 cards
Supported graphics API	DirectX 12 Ultimate, OpenGL 4.6, OpenCL 3.0, Vulkan 1.3, oneAPI, OpenVINO		
Hardware video encode/decode	H264/H265/AV1/VP9		
<b>Hardware</b>			
Formfactor	Low Profile Single Slot	Standard Height Single Slot	Standard Height Single Slot
Dimensions	Length: 16.76 cm (6.6") Height: 6.86 cm (2.7")	Length: 25.38 cm (9.99") Height: 12.68 cm (4.99")	Length: 26.45 cm (10.41") Height: 12.68 cm (4.99")
Bracket	Standard Height (Mounted) Low Profile (in the box)	Standard Height	Standard Height
<b>Environmental &amp; Power consumption</b>			
Cooling	Active		
Power consumption	50W	75W	130W
Operating temperature	0 to 45 °C (32 to 113 °F)		
Regulatory compliance	FCC (US) Class A, CE (European Union) Class A, RCM (Australia/New Zealand) Class A, KC (Korea) Class A, ICES-3 (Canada) Class A, UKCA (United Kingdom) Class A		
Environmental compliance	EU RoHS, China RoHS, REACH		
Warranty <sup>1</sup>	3 years		
<b>Software &amp; API</b>			
MatroxPowerDesk for Windows	3	3	3
Mura Developer tools	3	3	3
Operating systems	Windows 10 64-bit & LTSC (ver 2021 and up) / Windows 11 64-bit		
System requirements <sup>2</sup>	Single available PCIe 3.0 (or newer) x8 slot Intel Core Processor from 10th Gen to 14th Gen, Intel Xeon W-2400 and W-3400 processor for workstations Resizable BAR (reBAR) or Smart Access Memory (SAM)		
<b>Accessories (sold separately)</b>			
MiniDisplayPorttoDisplayPortadapter	CAB-MDP-DPF	—	CAB-MDP-DPF3
Secure cable solution	SK-SLNB-4F	—	—

1. Extended two-year warranty available.

2. Please refer to the Luma Pro system validation guide for more information.

3. Eight CAB-MDP-DPF adapters are included with the LUMA Pro A380 Octal card.