

# MATROX® VIDEO MULTI-DISPLAY GRAPHICS CARDS



## Matrox® LUMA Series Drive Multi-Display 8K HDR Desktop Applications

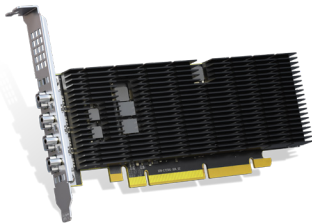
Drive two 8Kp60 / 5Kp120 displays or up to four high-resolution displays or projectors—up to 5Kp60—from a single Matrox® LUMA Series graphics card. Designed and built for reliability, stability, and ease of deployment, these PCI Express® 4.0 x8 boards are ideal to power multi-screen desktops and workstations in a range of 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. Matrox LUMA 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 high-resolution displays from a single LUMA Series graphics card.
<b>5K resolution support</b>	Power up to two 5Kp120 or four 5Kp60 displays from a single LUMA Series graphics board.
<b>Advanced capabilities</b>	Support advanced hardware media codecs including H.264, HEVC, AV1, and VP9, along with Microsoft® DirectX® 12 Ultimate, OpenGL® 4.6, OpenCL™ 3.0, Vulkan® 1.3, and Intel® oneAPI Video Processing Library (oneVPL and OpenVINO™). And with up to 6 GB of graphics memory, LUMA Series graphics cards bring superior video playback and performance to a wide variety of multi-display desktop applications.
<b>Long product lifecycle and dedicated support</b>	Benefit from a product longevity of five years and dedicated customer support. Your product carries a three-year warranty and has an available extended warranty to ensure maximum protection.
<b>DisplayPort™ 2.1</b>	Deliver the best display density, resolution, and performance for demanding multi-monitor applications with PCIe® 4.0 x8 graphics cards featuring four native DisplayPort connectors (DP++) and supporting DVI/HDMI passive adapters.
<b>TAA-compliant SKU available</b>	Integrated design, engineering, and manufacturing based in a TAA-designated country for guaranteed quality and reliability.
<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.

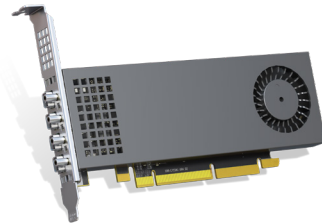
## DisplayPort graphics cards to drive multi-display configurations of any size

LUMA Series, powered by Intel® Arc™ graphics, supports numerous types of multi-display configurations enabling you to create the optimal setup for every need. You can power four-monitor setups to deliver high-impact configurations—with a single card.



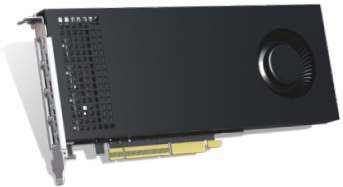
**LUMA A310**

Low-profile PCIe® Gen4 x16 (x8 electrical) quad graphics card provides increased reliability through its fanless design for both small form factor and full-height systems.



**LUMA A310F**

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



**LUMA A380**

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

# 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

## Applications



Retail



Industrial



Transportation and Aviation



Healthcare



Commercial Gaming



Education



Federal and Defense



Control Rooms



Utilities and Process Control

# Technical specifications

Product	LUMA A310	LUMA A310F	LUMA A380
Part number	LUMA-A310	LUMA-A310F	LUMA-A380
Bus type	PCIe 4.0 x16 (x8 electrical)	PCIe 4.0 x16 (x8 electrical)	PCIe 4.0 x16 (x8 electrical)
Number of video outputs	4	4	4
Video output connectors	4x Mini DisplayPort (secure)	4x Mini DisplayPort (secure)	4x DisplayPort
DisplayPort specification	2.1 UHBR10	2.1 UHBR10	2.1 UHBR10
Maximum number of cards in a system	4	4	4

Performance			
Maximum resolution	2x 8K60/5K120 or 4x 5K60 HDR 12b	2x 8K60/5K120 or 4x 5K60 HDR 12b	2x 8K60/5K120 or 4x 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>	<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>	<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	4GB GDDR6	6GB GDDR6
GPU	Intel® Arc™ A310	Intel® Arc™ A310	Intel® Arc™ A380
Multi-stream audio	High-Definition audio streams on four digital ports simultaneously		

Additional features			
DisplayPort features	VESA DSC 1.2a and Adaptive Sync		
HDCP compliance	2.3	2.3	2.3
Board-to-board framelock	—	—	—
Supported graphics API	DirectX 12 Ultimate, OpenGL 4.6, OpenCL 3.0, Vulkan 1.3, oneAPI and OpenVINO™		
Hardware video encode/decode	H264/H265/AV1/VP9		

Environmental & Power consumption			
Cooling	Passive	Active	Active
Power consumption	30W	50W	75W
Operating temperature	0 to 45 °C (32 to 113°F)	0 to 45 °C (32 to 113°F)	0 to 45 °C (32 to 113°F)

Hardware			
Form factor	Low Profile Single Slot	Low Profile Single Slot	Full Height Single Slot
Dimensions	Length: 16.76 cm (6.6") Height: 6.86 cm (2.7")	Length: 16.76 cm (6.6") Height: 6.86 cm (2.7")	Length: 25.38 cm (9.99") Height: 12.68 cm (4.99")
Bracket	Full Height (Mounted) Low Profile (in the box)	Full Height (Mounted) Low Profile (in the box)	Full Height

Environmental & Power consumption			
Regulatory compliance	FCC (US) Class B, CE (European Union) Class B, RCM (Australia/New Zealand) Class B, KC (Korea) Class B, ICES-3 (Canada) Class B, UKCA (United Kingdom) Class B		
Environmental compliance	EU RoHS, China RoHS, REACH		
Warranty**	3 years	3 years	3 years

Software & API			
Matrox PowerDesk for Windows	✓	✓	✓
Mura Developer tools	✓	✓	✓
Operating systems	Windows 10/11, Windows Server 2022*, and Ubuntu***		
System requirements	Single available PCIe 3.0 (or newer) x8 slot, Resizable BAR (reBAR) or Smart Access Memory (SAM)		

Accessories (sold separately)			
Mini DisplayPort to DisplayPort adapter	CAB-MDP-DPF	CAB-MDP-DPF	—
Secure cable solution	SK-SLNB-4	SK-SLNB	—

\* Restriction may apply. Contact your Matrox Video representative for more information.

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## Contact Matrox Video

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