



# X<sup>7</sup>



**Universal video processor  
For video wall and multi-display systems**

**RGBlink<sup>®</sup>**





## Large scale video wall processing

Bring together entire video display systems with X7. With up to 32 outputs and a 64 mega pixel capacity, X7 is equally at home delivering fully synchronised video to large video walls or multiple video walls and creative displays of all types.

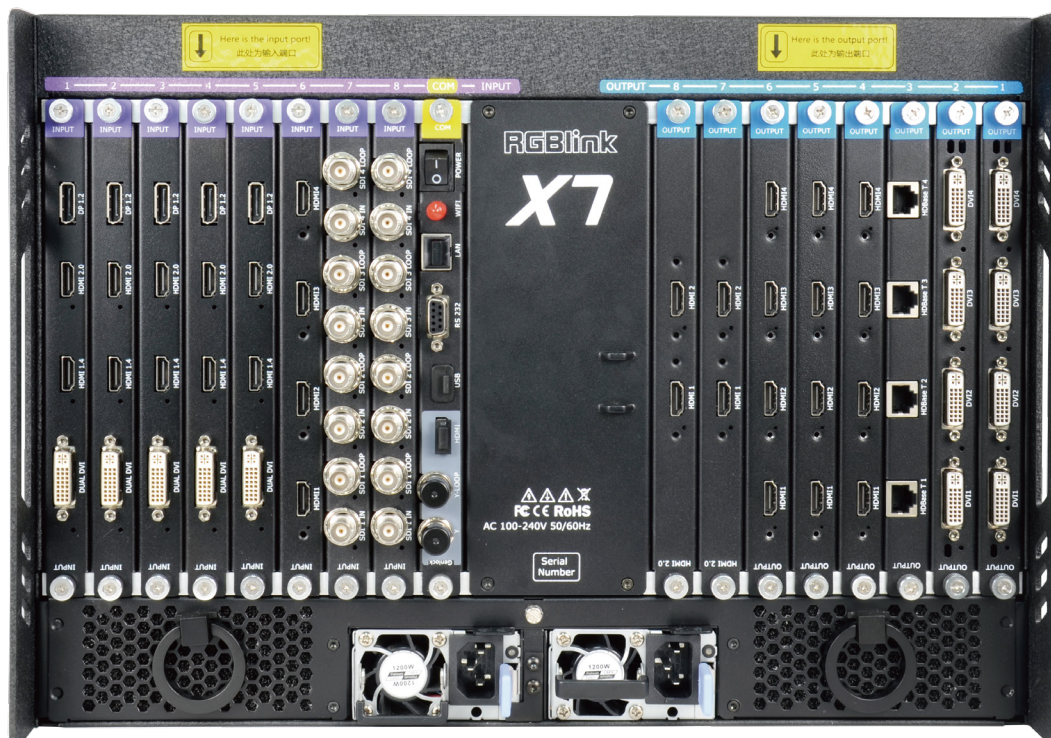
X7 is a true multi-window / multi-layer video wall solution. Connect and configure input sources just once while routing, scaling positioning and presenting across multiple outputs or display areas.

Modular throughout X7 supports RGBlink SmartSlot™ technology that offers a wide range of native signal choices including 4K options for both input and output and supporting hot-swap of modules.

Configure X7 on demand via RGBlink XPOSE software to create independent output pixel spaces for each physical display system regardless of type and arrangement. All processing and setting are on board the hardware X7 platform for high performance low latency video.

### Features

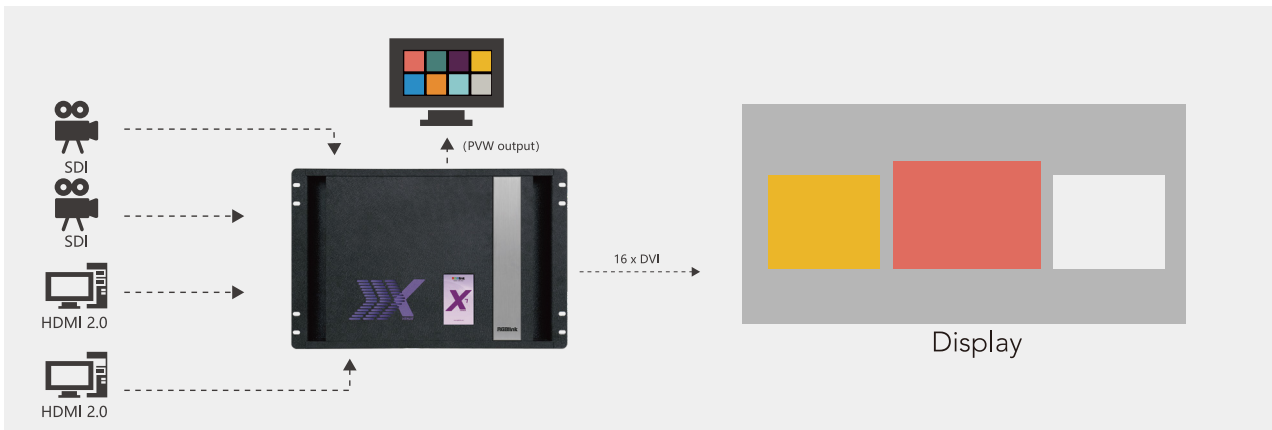
- Fully modular design
- Wide range of input signal options
- Fit up to eight 4K@60 outputs
- Fit up to 32 2K ARO advanced rotation outputs
- 64 mega pixel capacity
- Multi-mode operations
- LOGO Capture, DSK and OSD on board
- Genlock In & Digital Reference support
- Support for redundant power supply
- Store and recall presets on board
- Save settings and presets offline



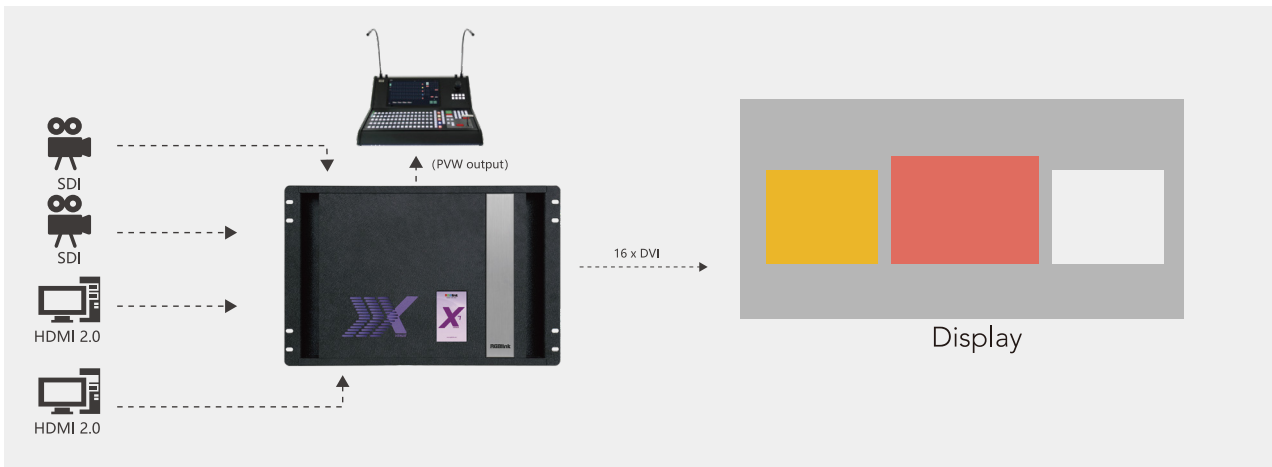
# 4K60

## Presentation Switching

Preview Presets and TAKE to output with seamless switching.



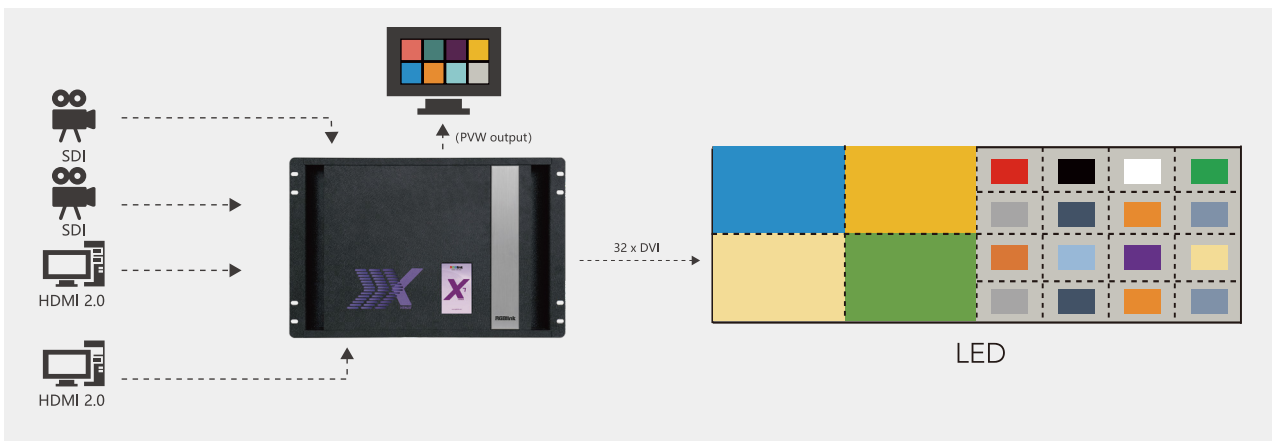
Example: Use XPOSE to control X7, preview Presets (PST) from the software, switch/TAKE on demand to PGM.



Example: Use T1 to control X7, preview Presets (PST) from the software, switch/TAKE on demand to PGM.

## Video Wall Control

Output to up to 32 displays for a continuous video wall with multiple video layers arranged across the output display area.



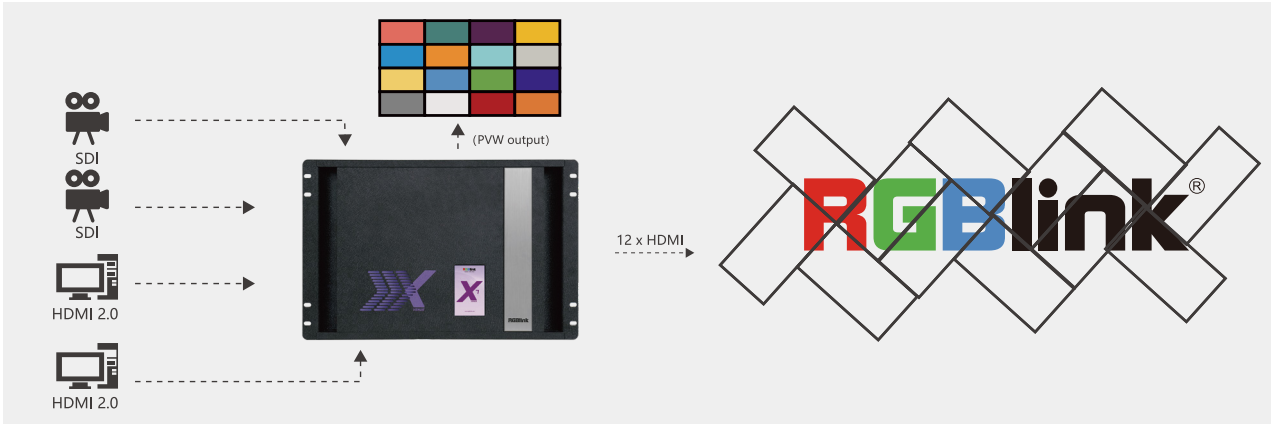
Example: 32 displays arranged as a video wall for control room monitoring application.

\* Processor shown with optional modules fitted – refer specification and manuals for details

\*\* Some features may require firmware updates and XPOSE 2.0 for configuration.

### ARO Rotation

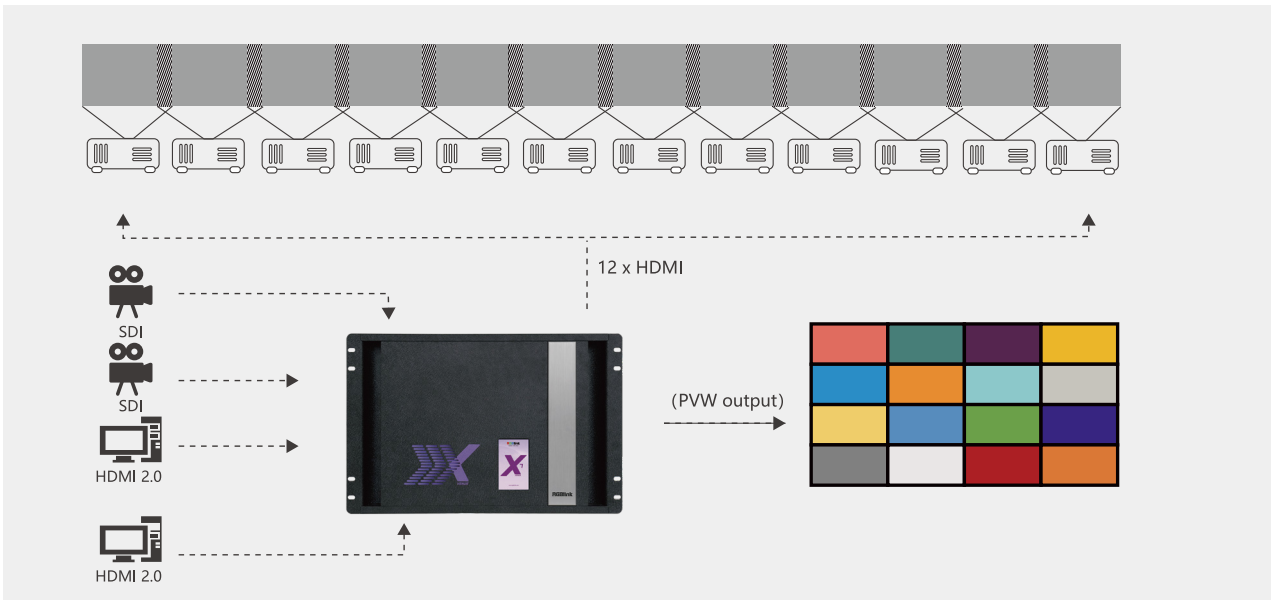
Output to creatively arranged displays with each output positioned arranged and scaled separately.



Example: X7 fitted with three ARO output modules providing 12 2K outputs.

### ARO Blending

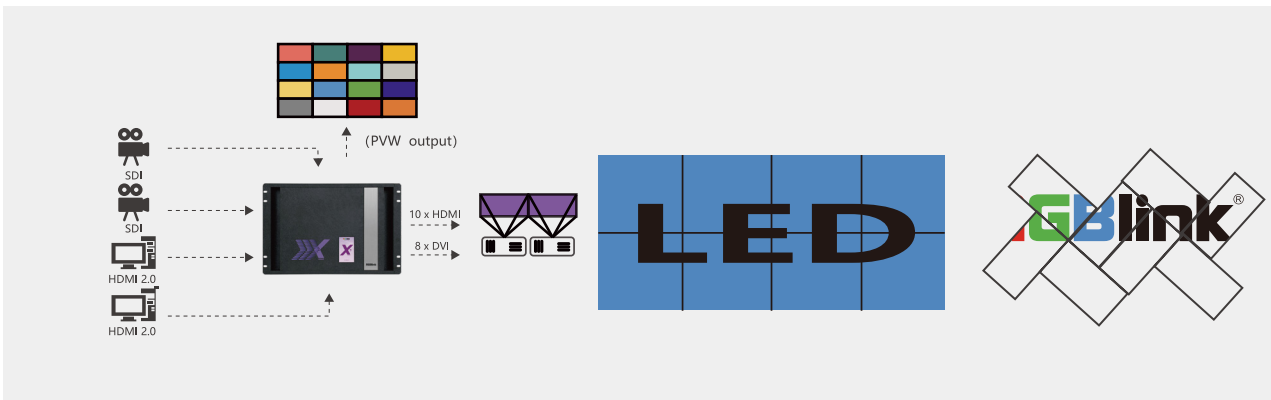
Output to projectors with variable edge blending to create large seamless display surfaces arranged in any way.



Example: X7 fitted with three ARO output modules providing 12 2K outputs with Edge Blending configured from XPOSE.

### Display Systems

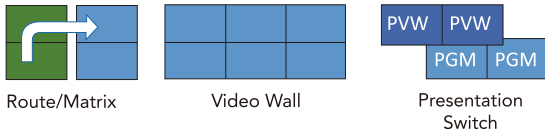
Make use of multiple system models to configure and control combinations of displays as a single system.



Example: X7 with a combination of ARO modules for blending and rotation and 2K DVI output modules connected to LED display.

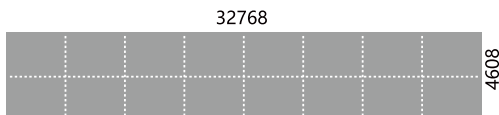
## Multi-Mode Operations

X7 outputs can be configured in one or multiple modes, with pixel space allocated to each mode as a virtual container. Operation modes include Matrix, Video Wall, Presentation, 3D, Rotation and Blending.



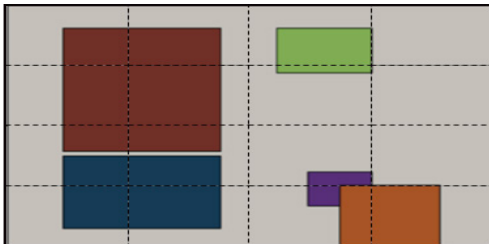
## 128 Mega Pixel Splicing

Fit up to 32 2k or 16 4k outputs to create continuous video walls in any arrangement with all video fully synchronised to the outputs, pixel-to-pixel. Use with displays including LED, LCD and projection.



## Multi-Layer | Multi-Window

Output video layers or windows scaled and positioned across one or more outputs. A fully configured X7 can support up to 64 layers (or 256 layers if all outputs are H.264 modules).



## Remote Control

Control X7 from RGBlink XPOSE, XPOSE mobile or T Series consoles. For integrators, control via RGBlink OpenAPI is also available.

The XPOSE control platform provides intuitive rich controls unlocking and enabling powerful video control scenarios on the X7 hardware processing platform.



## Store Settings

All settings including presets are stored on board, these configuration files may also be download and stored offline.

## UHD 4K 60Hz Signal Support

RGBlink 4K input and output modules may be used with X7. 4K@60 Digital inputs include HDMI 2.0 and DisplayPort 1.2, and 12G SDI is also available. 4K @60 outputs include HDMI 2.0 and 12G SDI. X7 supports HDCP 2.2.



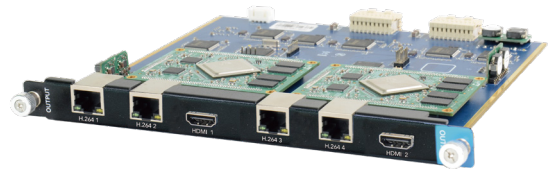
## Full Color Space

Internal high bandwidth processing maximises quality and with 4:4:4 color space support.



## H.264 video stream

Stream video input sources via dedicated H.264 ports. Display source previews in XPOSE or video players. Customise port configurations to suit the application.



## Modular by Design

All X7 inputs and outputs are modular and hot swappable. Arranged in slots, each slot supporting a 4K signal or four 2K signals. A wide range of signal options available allowing native connections.

## Configure Outputs

Set the output resolution and scale to multiple display sizes, take advantage of outputs arranged in multiple container/display areas for flexible multi-display use.

## Rotate with Precision

Fit ARO™ Advanced Rotation Output modules to orient video in support of physically rotated and creativity arranged displays. ARO outputs may be rotated in 1-degree increments and positioned in pixel space. Use zoom to support display of differing density.

## Synchronise

X7 includes both Genlock and HDMI Digital Reference inputs, allowing a variety of synchronisation scenarios.

## LOGO/Frame Capture

Capture a frame and store on board for recall on demand, including for use as fallback.

## Preview Sources

Install up to four PVW source preview modules in any of the X7's output slots to stream video sources to XPOSE or third-party clients. Connect the display via DVI for local multi-view source monitoring.





# Specification

Connections	Input	8 slots up to 32 inputs, select from below				
		4K@60 Module	1 x DVI-I   2 x HDMI-A   1 x DP		DVI Module	4 x DVI-I
		12G SDI Module	4 x BNC (1 x 12G/6G SDI or 4 x 3G SDI)		H.264 Module	4 x RJ45
		3G SDI Module	8 x BNC (4 In   4 Loop)		HDBaseT Module	4 x RJ45
		4K@30 Module	2xDVI-I   2xHDMI-A (1 In/1 Loop)   2xDP(1 In/1 Loop)		VGA Module	4xDB15
	HDMI Module	4 x HDMI-A		CVBS Module	8xBNC (4 In   4 Backup)	
	Output	8 slots up to 32 outputs, select from below				
		4K HDMI Module	2 x HDMI-A		3G SDI Module	4 X BNC
		2K HDMI Module	4 x HDMI-A		Rotation Module	4 x DVI-I
	PVW	HDBaseT Module	4 x RJ 45		DVI Module	4 x DVI-I
H.264 Module		4 x RJ45   2 x HDMI-A				
Communications	Fit to Output Slot, select from					
	PVW Module	1 x RJ 45   2 x DVI-I				
	LAN	1 x RJ 45		USB	1 x USB-A	
	RS 232	1 x DB 9		WIFI	1 x I-PEX Connector	
Power	2 Slots, up to 2 power		1 x IEC (Each Power)			
Performance	Input Resolution	<b>SDI</b>				
		SMPTE	480i   576i   720p@23.98/24/25/29.97/30/50/59.94/60   1080i@59.94/60   1080p@23.98/24/25/29.97/30/50/59.94/60   1080psf@23.8/24/25/29.7/30   2160p@23.98/24/25/29.97/30/50/59.94/60			
		<b>DVI</b>				
		SMPTE	720p@23.98/24/25/29.97/30/50/59.94/60   1080p@23.98/24/25/29.97/30/50/59.94/60   1080psf@23.8/24/25/29.7/30   2160p@30   1080psf@23.8/24/25/29.7/30   2160p@30			
		VESA	800x600@60   1024x768@60   1280x768@60   1280x960@60   1280x1024@60   1360x768@60   1440x900@60   1400x1050@60   1600x1200@60   1680x1050@60   1920x1080@60   2048x1080@60   2048x1152@60   2560x960@60   3840x2160@30			
		<b>HDBaseT</b>				
		SMPTE	720p@50/60   1080p@24/25/30/50/60			
		VESA	800x600@60/75/85   1024x768@60/75/85   1280x768@60   1280x800@60   1280x1024@60/75/85   1360x768@60   1366x768@60   1400x900@60   1400x1050@60   1600x1200@60   1680x1050@60   1920x1080@60   1920x1200@60   2048x1152@60   2560x812@60   2560x960@60   2048x816@60			
		<b>H.264</b>				
			176x144   240x180   320x180   320x240   320x256   352x228   352x480   400x224   400x320   480x270   480x272   480x320   480x360   480x480   544x480   608x448   640x360   640x480   704x576   720x404   720x480   720x540   720x576   850x480   1024x576   1280x720   1680x1056   1920x1080			
		<b>HDMI   DisplayPort</b>				
		SMPTE	720p@23.98/24/25/29.97/30/50/59.94/60   1080p@50/59.94/60   2160p@30/60			
		VESA	800x600@60   1024x768@60   1280x768@60   1280x800@60   1280x1024@60   1360x768@60   1366x768@60   1400x900@60   1600x1050@60   1600x1200@60   1680x1050@60   1920x1080@60   1920x1200@60   2048x1080@60   2048x1152@60   2560x812@60   2560x960@60   2560x1600@60   3840x1080@60   3840x2160@30   3840x2160@60   4096x2160@60			
		Output Resolution	Select from below or configure customized			
			<b>SDI</b>			
SMPTE	720p@23.98/24/25/29.97/30/50/59.94/60   1080p@23.98/24/25/29.97/30/50/59.94/60   1080psf@23.8/24/25/29.7/30					
<b>DVI   HDBaseT</b>						
SMPTE	720p@50/60   1080p@50/59.94/60					
VESA	800x600@60   1024x768@60/75/85   1280x720@50/59.94/60   1280x800@60   1280x960@60   1280x1024@60/75/85   1400x1050@60   1600x1200@60   1920x1080@23.98/24/25/29.97/30/50/59.94/60   2048x1152@60					
<b>HDMI</b>						
SMPTE	720p@25/30/50/60   1080p@23.98/24/25/29.97/30/50/59.94/60					
VESA	800x600@60   1024x768@60   1280x768@60   1280x800@60   1280x1024@60   1360x768@60   1366x768@60   1400x900@60   1600x1050@60   1600x1200@60   1680x1050@60   1920x1080@60   1920x1200@60   2048x1152@60   2560x812@60   2560x960@60   2560x1600@60   3840x1080@60   3840x2160@60   4096x2160@60					
<b>H.264</b>						
	176x144   240x180   320x180   320x240   320x256   352x228   352x480   400x224   400x320   480x270   480x272   480x320   480x360   480x480   544x480   608x448   640x360   640x480   704x576   720x404   720x480   720x540   720x576   850x480   1024x576   1280x720   1680x1056   1920x1080					
Supported Standards	<b>HDMI</b> 2.0 <b>DisplayPort</b> 1.2 <b>DVI</b> Dual Link	<b>SDI</b> <b>HDBaseT</b>	SMPTE ST 2082-1, SMPTE ST 2081-1, SMPTE ST 424, SMPTE ST 292-1, SMPTE ST 259, DVB-ASI, MADI			
Grey Level	12 bit					
Color Space	4:4:4					
Power	Input Voltage	AC 100V-240V, 50/60Hz				
	Max Power	1200W				
Environment	Temperature	0°C ~ 55°C				
	Humidity	10%~90%				
Physical	Weight	Net (Device)	18kg			
		Packaged	45kg			
	Dimensions	Net (Device)	482mmx385mmx311mm			
		Packaged	547mmx620mmx415mm			

## Order codes

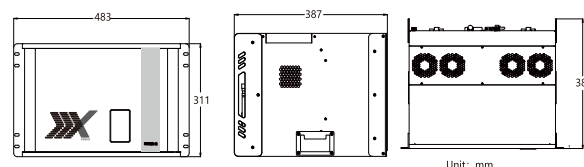
310-0007-00-0

Venus X7

\*Refer to specifications for module options

**HDMI® HDCP™**

## Dimensions



Unit: mm

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