



Colorlight

CS20-8K

Multimedia Server

Specification V3.0

Introduction

CS20-8K is a highly capable multimedia server that excels in playback control performance, scalability, and stability. It boasts powerful hardware that enables the decoding and playback of 8K videos, while also allowing for the output of four 4K@60Hz video signals. Paired with the preinstalled GrandShow, a professional playback and control software crafted by Colorlight, CS20-8K can simultaneously decode and play materials across various formats, delivering multiple display effects such as multi-screen splitting and irregular-shaped screen splicing. Moreover, it offers flexible features such as multiple layers, multiple scenes, multi-device cascading, and seamless switching. These capabilities fully satisfy the diverse demands of the playback control industry.

Features

- 4×Mini DP video output ports (up to 4K@60Hz per port)
- A single device supports pixel-to-pixel control and playback of up to 8192 × 4608@60Hz
- Front panel touchscreen allows for device information display, project loading, scene switching, color adjustment, and more
- Playback of diverse materials, such as videos, images, PPTs, and texts
- Multi-scene operations such as editing, previewing, switching, saving, and copying
- Quick functions such as screen freezing, background image display, and scene switching
- 10bit HDR video decoding and playback
- Creative display options such as arbitrary image rotation, ultra-long displays, special-shaped screen splicing, and irregular screen splitting
- Real-time monitoring of the system operating status, providing alerts in case of device failure or playback material anomalies
- Preview of playback content and real-time monitoring of output image
- Quick control using an external MIDI controller
- External signal capture through NDI or capture cards
- Multi-device primary-backup redundancy
- Wake-on-LAN, auto-startup upon power-on, and scheduled shutdown, enabling unattended operation
- Control via tablet app for visualized operations like image monitoring and seamless scene switching
- Supports central control protocols for scene switching, image playback, volume adjustment and other functions

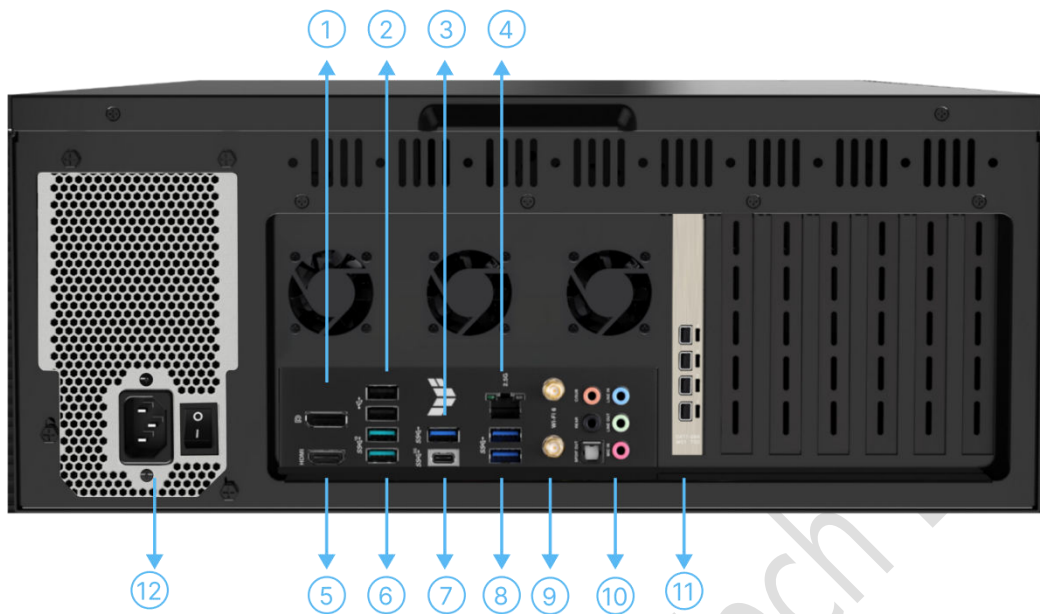
Appearance

Front Panel



No.	Item	Description
1	7-inch LCD touchscreen	Displaying system operating information; Allowing for quick operation of certain functions (accessible only after opening GrandShow)
2	USB	2×USB 3.0 ports for external devices such as keyboard, mouse, and USB flash drive
3	Power switch	Power on/off the device

Rear Panel



No.	Item	Description
1	DP	1×DP output port, connecting to an LCD screen to display the software editing and control interface
2	USB2.0	2×USB 2.0 ports
3	USB 3.2 Gen 1	1×USB 3.2 Gen 1 port
4	RJ45	2.5Gb Ethernet port
5	HDMI	1×HDMI output port, connecting to an LCD screen to display the software editing and control interface
6	USB 3.2 Gen 2	2×USB 3.2 Gen 2 ports
7	USB 3.2 Gen 2	USB 3.2 Gen 2 Type-C port
8	USB 3.2 Gen 1	2×USB 3.2 Gen 1 ports
9	Antenna port	WiFi 6 antenna port
10	Audio port	Audio port, supporting 7.1-channel
11	Mini DP port	4×Mini DP graphics card output ports
12	AC 100~240V	AC power input

Application



Specifications

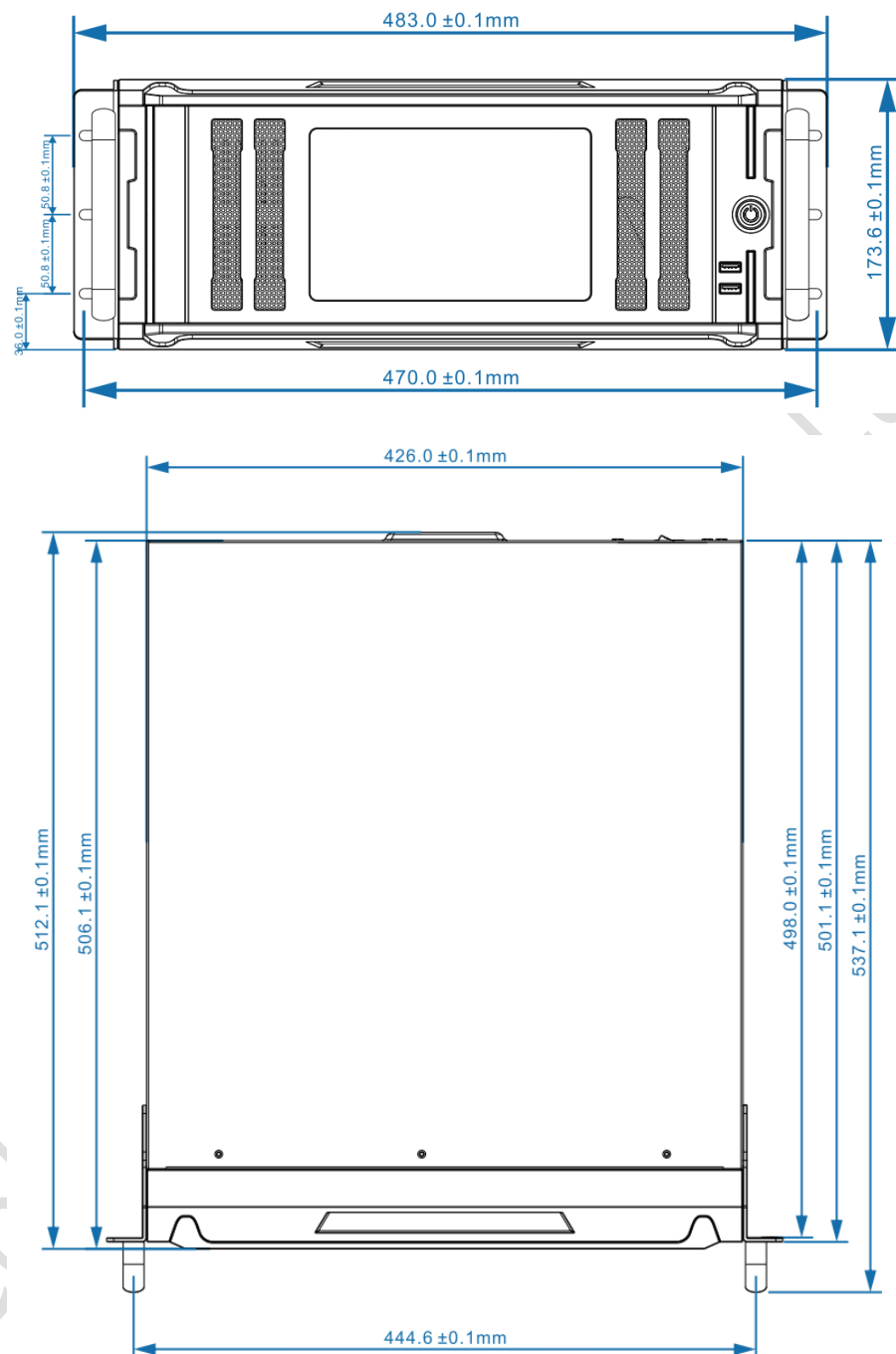
Model		CS20-8K
Chassis		4U
Operation interface port		HDMI×1/DP×1 (maximum 4096×2160@60Hz)
CPU		Intel 16-core 24-thread processor
RAM		16G
Storage		500G+250G M.2 high-speed SSD (expandable)
Capture card (optional)		HDMI, SDI, DP, DVI ports
Graphics card		Quadro 4GB professional graphics cards
Video port		Mini DP×4
Maximum output (single port)		4096×2304@120Hz
Maximum output (whole device)		8192×4608@60Hz
Audio		Audio input and multi-channel output
Network		2.5Gbps
Playback and control software		GrandShow
Operating environment	Temperature	0°C~45°C/32° F~113° F
	Humidity	10%RH~80%RH, non-condensing
Storage environment	Temperature	0°C~50°C/32° F~122° F
	Humidity	10%RH~90%RH, non-condensing
Electrical specifications	Power supply	AC100~240V, 50/60Hz
	Power	300W
Physical specifications	Net weight	17kg/37.5lbs
	Dimension (W×H×D)	483.0mm×173.6mm×506.1mm/19.02"×6.83"×19.93"

Signal Formats

Mini DP1.4 (4)					
Output	Maximum Resolution	Color Space	Sampling	Color Depth	Frame Rate
4K	4096x2304	YCbCr	4:2:2	8/10bit	23.98, 24, 25, 29.97, 30, 50, 59.94, 60
		YCbCr/RGB	4:4:4	8/10bit	
	3840x2160	YCbCr	4:2:2	8/10bit	
		YCbCr/RGB	4:4:4	8/10bit	
2K	2048x1080	YCbCr	4:2:2	8/10bit	23.98, 24, 25, 29.97, 30, 50, 59.94, 60, 100, 120
		YCbCr/RGB	4:4:4	8/10bit	
	1920x1080	YCbCr	4:2:2	8/10bit	23.98, 24, 25, 29.97, 30, 50, 59.94, 60, 100, 120
		YCbCr/RGB	4:4:4	8/10bit	

Dimensions

Unit: mm



Packing List

No.	Name	Quantity
1	CS20-8K Multimedia Server	1PCS
2	GrandShow software kit	1PCS
3	Mini DP to DP cable	4PCS
4	HDMI cable	1PCS
5	WiFi antenna	1PCS
6	Power cord	1PCS
7	Keyboard and mouse combo	1PCS
8	Product certification	1PCS
9	Warranty card	1PCS

Statement

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Colorlight

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