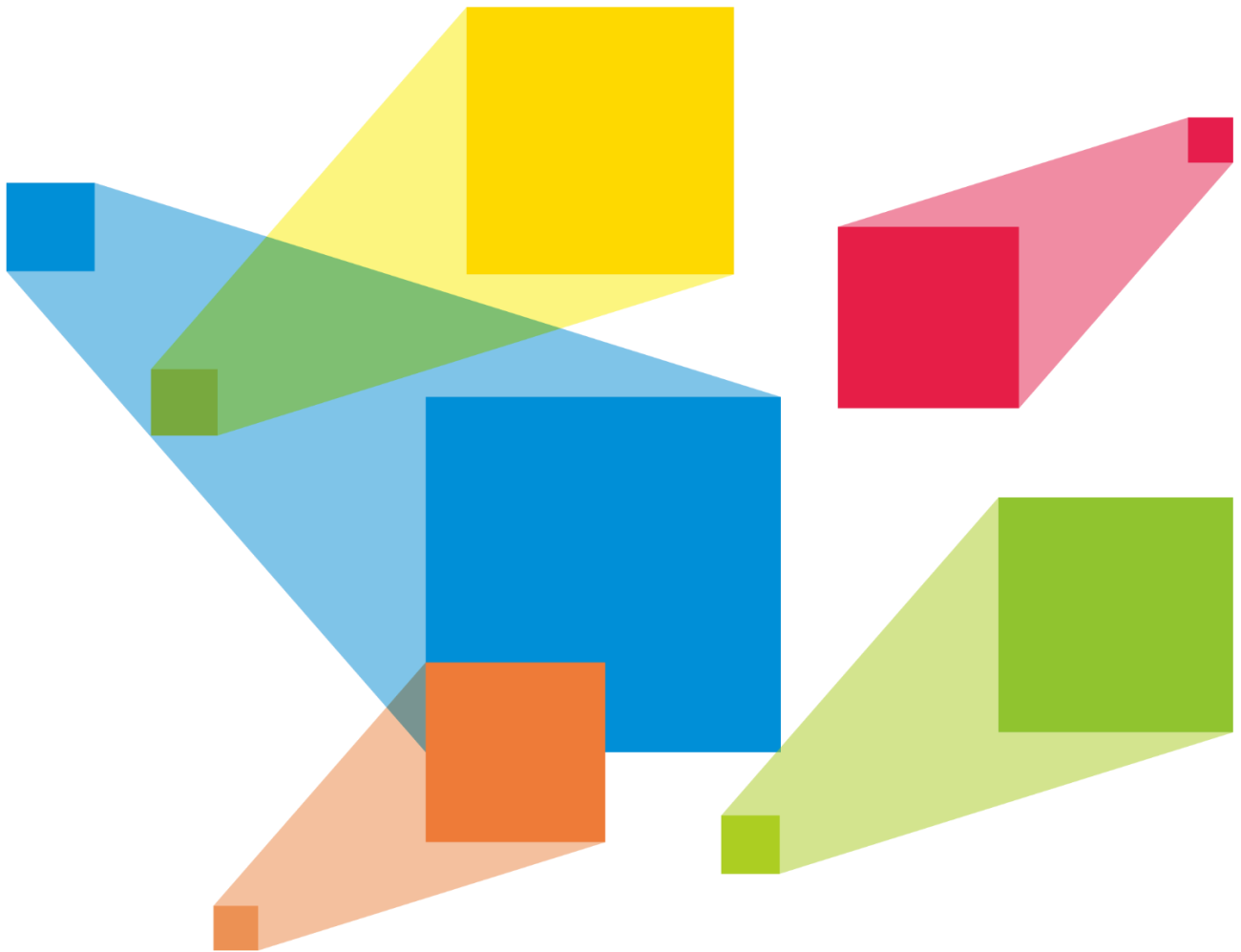


# ET1S-500G

## Media Server



Specifications

## Change History

Release Version	Release Date	Description
V1.0.0	2024-09-14	First release

## Introduction

The ET1S-500G is a new media server designed by NovaStar for small-scale LED or LCD fixed installation applications. It not only boasts high-quality, ultra-high-resolution pixel-to-pixel display capabilities but also offers diversified mosaic creativity and outstanding media arrangements for professional stage performances. Built-in with intuitive and user-friendly media playback and control software Kompass FX1, the ET1S-G simplifies stage display management and provides best-in-class human-machine interaction. It is ideally suited for exhibitions, showrooms, small-scale conference rooms, and a variety of creative display applications.

## Certifications

CE, FCC, IC, RoHS

**If the product does not have the relevant certifications required by the countries or regions where it is to be sold, please contact NovaStar to confirm or address the problem. Otherwise, the customer shall be responsible for the legal risks caused or NovaStar has the right to claim compensation.**

## Features

- A single unit supports 1x 4Kx2K@60Hz output capacity, ultra-high-resolution video decoding and pixel-to-pixel display
- Multiple connector outputs
  - 1x DP 1.2 output
  - 4x HDMI 1.3 together copy DP 1.2 output content
  - 1x HDMI 2.0 copies DP 1.2 output content
- Firmware update supported
- A single output can be split into up to 1024 partitions, allowing for quick mapping settings and ultra-wide screen configuration
- Playback of up to 4 layers and 1 audio simultaneously
- Visualized program arrangement and management
- Media library management, including videos, pictures, PowerPoint files and audios
- Media file sorting
- Media file batch import
- NDI sources, website sources, streaming media sources and text sources supported
- Media collection configurations
- Up to 1080p PowerPoint files supported
- Using a laser pointer for moving between slides in PowerPoint
- Playback progress management
- Program auto jump
- Adjustable media width, height and priority
- Main KV jumping settings
- Main media based playback progress management
- Crossfade on program switching
- Layer mask and cropping supported
- Hardware decoding
- One-click FTB
- Auto startup of built-in software on system power on, auto program playback on software startup
- Control software VICP (Visual Intelligent Control Platform), enabling a highly efficient and user-friendly control experience

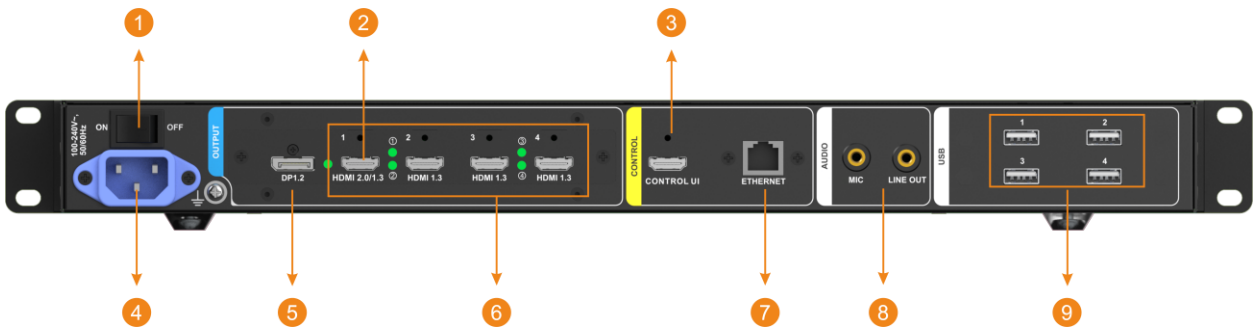
## Appearance

### Front Panel



No.	Area	Description
1	Power button	Turn on or turn off the device.
2	USB ports	2x USB 3.0 <ul style="list-style-type: none"> <li>• Connect to a mouse and keyboard.</li> <li>• Insert a USB drive for importing media files.</li> </ul>

### Rear Panel



No.	Area	Qty.	Description
1	Power switch	1	Power on or power off the device.
2	HDMI 2.0	1	HDMI 2.0/1.3 connector can be switched via software. When set to HDMI 2.0, HDMI 1.3 connectors 2, 3, and 4 are unavailable. <ul style="list-style-type: none"> <li>• Max output resolution: 4Kx2K@60Hz</li> <li>• Supported frame rates: 23.98/24/25/29.97/30/47.95/48/50/56/59.94/60</li> <li>• Custom resolutions supported                             <ul style="list-style-type: none"> <li>- Max width: 8192 pixels</li> <li>- Max height: 4095 pixels</li> </ul> </li> <li>• 8-bit output</li> <li>• Supported color space/sampling rate: RGB 4:4:4, YCbCr 4:4:4, YCbCr 4:2:2</li> <li>• Supported color range: Full and Limited</li> <li>• Audio output: Max 24 bit depth for dual-channel</li> <li>• Sampling rate: 24 KHz, 44 KHz, 48 KHz (default)</li> <li>• HDCP supported</li> </ul>

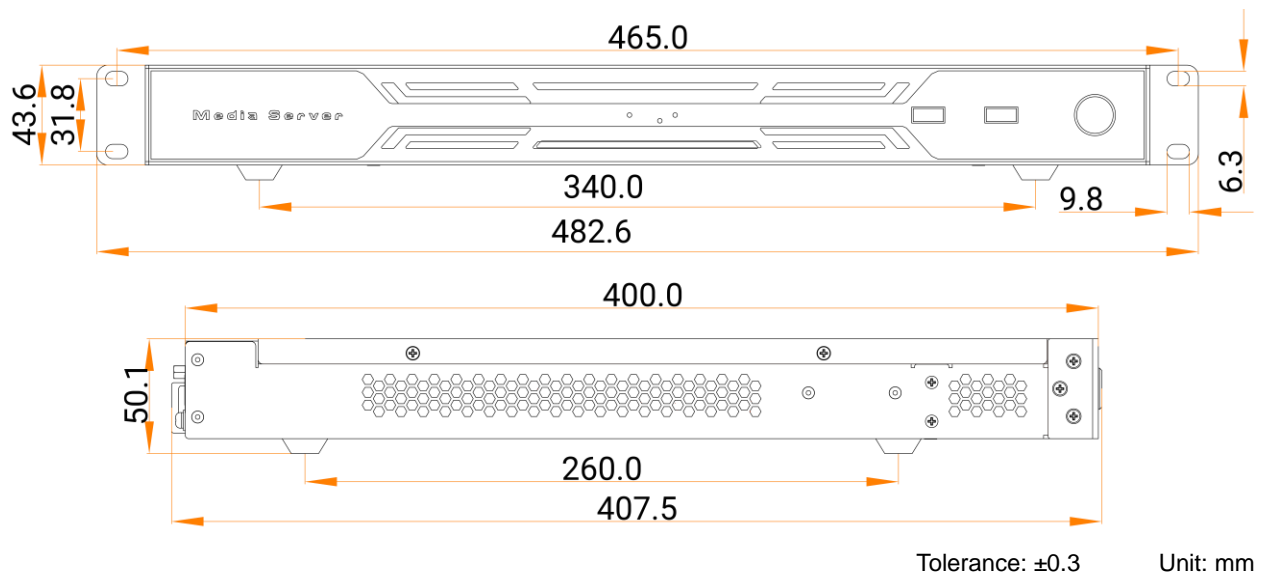
No.	Area	Qty.	Description
			<ul style="list-style-type: none"> <li>• Status LEDs:                             <ul style="list-style-type: none"> <li>– Green: Normal connection</li> <li>– Off: No connection or abnormal connection</li> </ul> </li> <li>• EDID lock supported</li> </ul>
3	CONTROL UI	1	Connect to a monitor for displaying the software interface. <ul style="list-style-type: none"> <li>• Max output resolution: 2Kx1K@60Hz</li> <li>• EDID lock supported</li> </ul>
4	Power connector	1	Connect to an external power outlet for powering the device.
5	DP 1.2	1	<ul style="list-style-type: none"> <li>• Max output resolution: 4Kx2K@60Hz</li> <li>• Supported frame rates: 23.98/24/25/29.97/30/47.95/48/50/56/59.94/60</li> <li>• Custom resolutions supported                             <ul style="list-style-type: none"> <li>– Max width: 8192 pixels</li> <li>– Max height: 4095 pixels</li> </ul> </li> <li>• 8-bit output</li> <li>• Supported color space/sampling rate: RGB 4:4:4, YCbCr 4:4:4, YCbCr 4:2:2</li> <li>• Supported color range: Full and Limited</li> <li>• Audio output: Max 24 bit depth for dual-channel</li> <li>• Adaptive sampling rates: 24 KHz, 44 KHz, 48 KHz (default)</li> <li>• HDCP supported</li> <li>• Status LEDs:                             <ul style="list-style-type: none"> <li>– Green: Normal connection</li> <li>– Off: No connection or abnormal connection</li> </ul> </li> <li>• EDID lock supported</li> <li>• Audio and video synchronization</li> </ul>
6	HDMI 1.3	4	4x HDMI 1.3 together copy the DP 1.2 output content. <ul style="list-style-type: none"> <li>• Max output resolution: 2Kx1K@60Hz</li> <li>• Supported frame rates: 23.98/24/25/29.97/30/47.95/48/50/56/59.94/60</li> <li>• Four HDMI 1.3 connectors default to a 2x2 output.</li> <li>• EDID settings supported                             <p>The EDID change is applied to all HDMI 1.3 connectors, while the change made to an individual connector is not supported.</p> <ul style="list-style-type: none"> <li>– Width: 640 to 2048 pixels</li> <li>– Height: 480 to 1280 pixels</li> </ul> </li> <li>• 8-bit output</li> <li>• Supported color space/sampling rate: RGB 4:4:4</li> <li>• Supported RGB color range: Full and Limited</li> <li>• HDCP supported</li> <li>• Status LEDs:</li> </ul>

No.	Area	Qty.	Description
			<ul style="list-style-type: none"> <li>- Green: Normal connection</li> <li>- Off: No connection or abnormal connection</li> <li>• EDID lock supported</li> <li>• Audio output NOT supported</li> </ul>
7	ETHERNET	1	1x RJ45 Realtek 1Gb Ethernet port for networking
8	Audio	2	<ul style="list-style-type: none"> <li>• 1x MIC: 3.5 mm audio input connector</li> <li>• 1x Line OUT: 3.5 mm audio output connector</li> </ul>
9	USB	4	4x Type-A USB 2.0 Connect to the mouse, keyboard or USB drive.

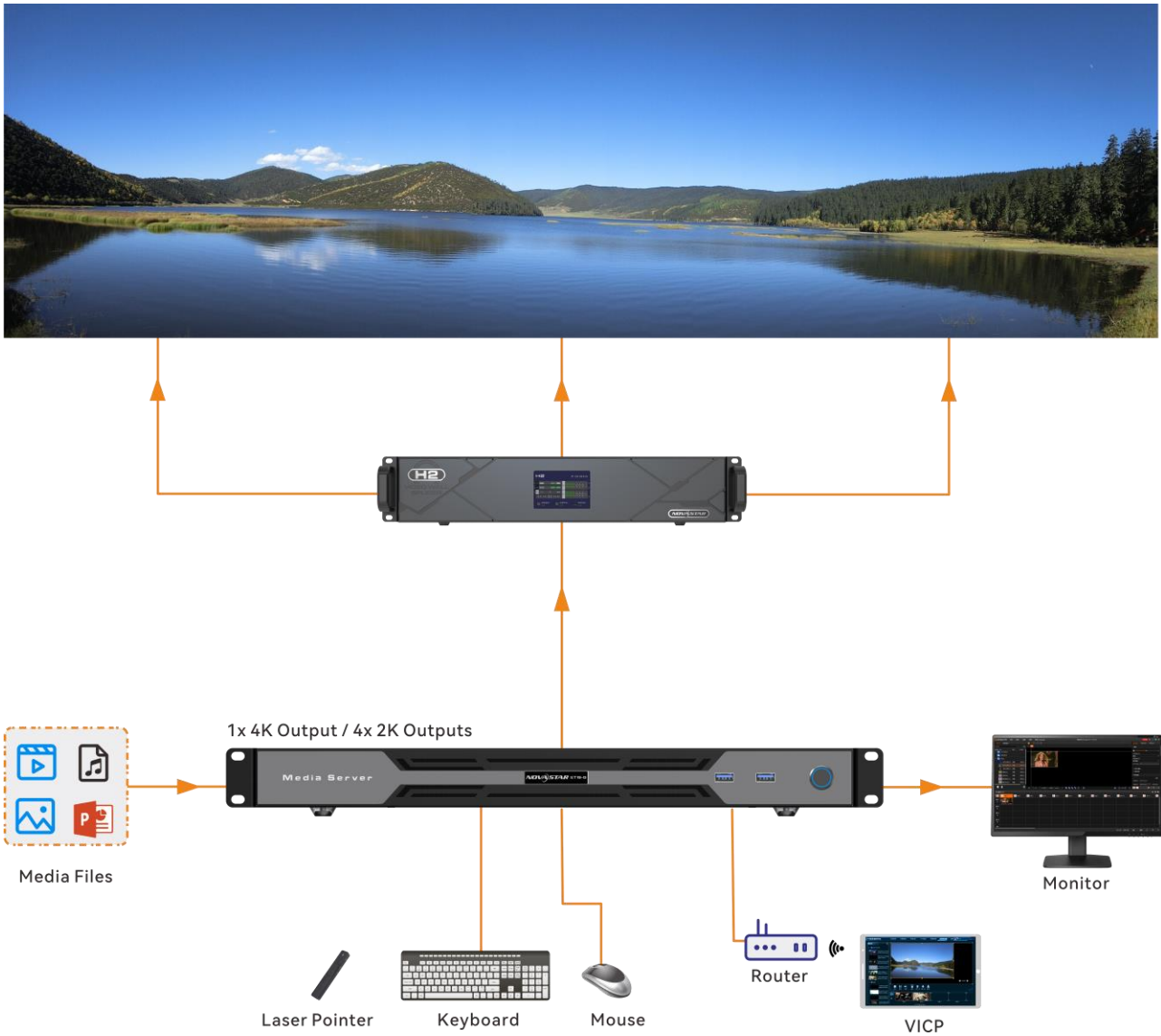
**Hardware/Software**

Power supply	120W open-frame power supply
CPU	AMD Ryzen 5th generation processor
Memory	16 GB high-speed DDR4
Mainboard	High-performance motherboard
Storage	High-speed SSD, 500 GB
Keyboard & Mouse	Keyboard and mouse suit
OS	Windows 10 Enterprise LTSC
Built-in software	Kompass FX1

**Dimensions**



## Applications



### Notes

- This product can only be placed horizontally. Do not mount vertically or upside-down.
- The product can be mounted in a standard 19-inch rack capable of withstanding at least four times the total weight of the mounted equipment. Four M5 screws should be used to fix the product.

## Specifications

<b>Electrical Specifications</b>	Power connector	100–240V~, 60/50Hz
	Power consumption	80 W
<b>Operating Environment</b>	Temperature	0°C to 45°C
	Humidity	0% RH to 80% RH, non-condensing
<b>Storage Environment</b>	Temperature	–10°C to +60°C
	Humidity	0% RH to 95% RH, non-condensing
<b>Physical Specifications</b>	Dimensions	482.6 mm × 43.6 mm × 400 mm
	Net weight	5.2 kg
<b>Packing Information</b>	Packing box	565 mm × 510 mm × 175 mm
	Accessories	1x Power cable 2x HDMI cables 1x DP 1.2 cable 1x Keyboard and mouse suit 1x Cat5e Ethernet cable 1x Label (Windows product key included) 1x Quick Start Guide 1x Safety Manual 1x Certificate of Approval

## Media File Types and Formats

The ET1S-500G supports the decoding of various common video coding formats, such as H.264, H.265, MPGE-4/2 and WMV.

Type	Format
Video	mp4, avi, mkv, flv, mov, wmv, mpeg, mpg, m4v
Picture	jpg, jpeg, bmp, png, gif, ico
Audio	mp3, aac, flac, amr, ape, wav, wma
Office files	PowerPoint files (1080p)

### Note

Recommended video coding formats:  
Resolutions ≤ 4K: H.264 (AVC) recommended

For a better image quality experience, the following video bitrates are recommended.

Recommended video bitrates for SDR uploads:

Type	Video Bitrate Standard Frame Rate (24Hz, 25Hz, 30Hz)	Video Bitrate High Frame Rate (48Hz, 50Hz, 60Hz)
2160 (4K)	35 to 45 Mbps	53 to 68 Mbps
1440 (2K)	16 Mbps	24 Mbps
1080p	8 Mbps	12 Mbps

## Notes and Cautions

### FCC Caution

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

### Others

This is Class A product. In a domestic environment, this product may cause radio interference in which case the user may be required to take adequate measures.



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