

# CVT4K-S

## Fiber Converter

V1.0.2



Specifications

## Change History

Document Version	Release Date	Description
V1.0.2	2020-11-20	<ul style="list-style-type: none"> <li>Updated the document template.</li> <li>Optimized the feature description.</li> <li>Optimized the appearance description.</li> <li>Optimized the dimensions diagram.</li> </ul>
V1.0.1	2018-05-17	<ul style="list-style-type: none"> <li>Changed the pictures in the document.</li> <li>Added features of the optical module.</li> <li>Added the certification information.</li> <li>Added the packing information.</li> </ul>
V1.0.0	2016-10-13	First release

## Introduction

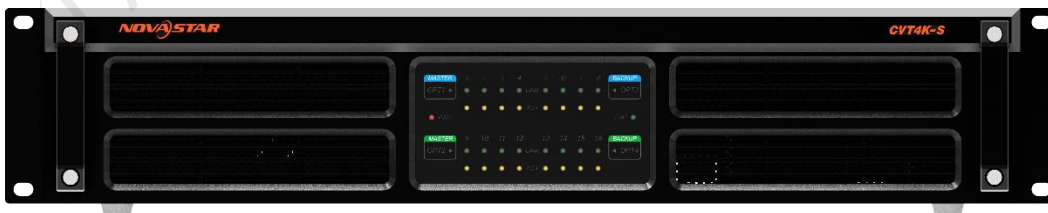
The CVT4K-S is a high-performance fiber converter developed by NovaStar. It is used for conversion between optical signals and electrical signals, allowing for long-distance signal transmission that is stable and not easily interfered with. Easy to use, the CVT4K-S makes it convenient to connect terminal devices and simplifies on-site wiring connections.

## Features

- 16x Neutrik Ethernet inputs or outputs
- 4x Single-mode twin-core LC optical ports, two as master inputs or outputs and the others as backup
- Dual redundant power supplies, more stable and reliable
- 2 types of power connectors (3-pin power socket and PowerCON), satisfying different customer needs
- 2 types of control ports (type-B USB and Ethernet), more flexible and convenient to connect a control computer
- Various indicators on the front panel to show device status clearly

## Appearance

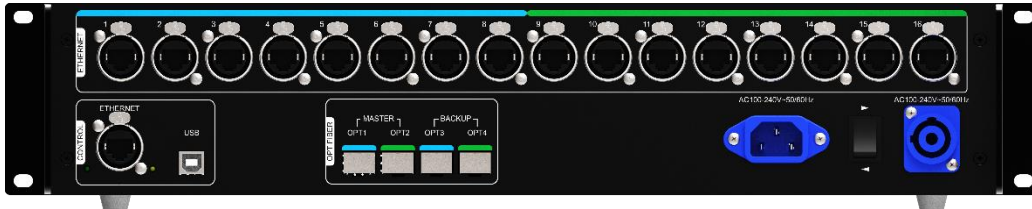
### Front Panel



Indicator	Color	Status	Description
1–16	Green	Always on	The Ethernet cable connection is normal.
	Yellow	Flashing	There is data transmission.
		Always on	There is no data transmission.
OPT1–OPT4	Green	Always on	The optical fiber connection is normal.

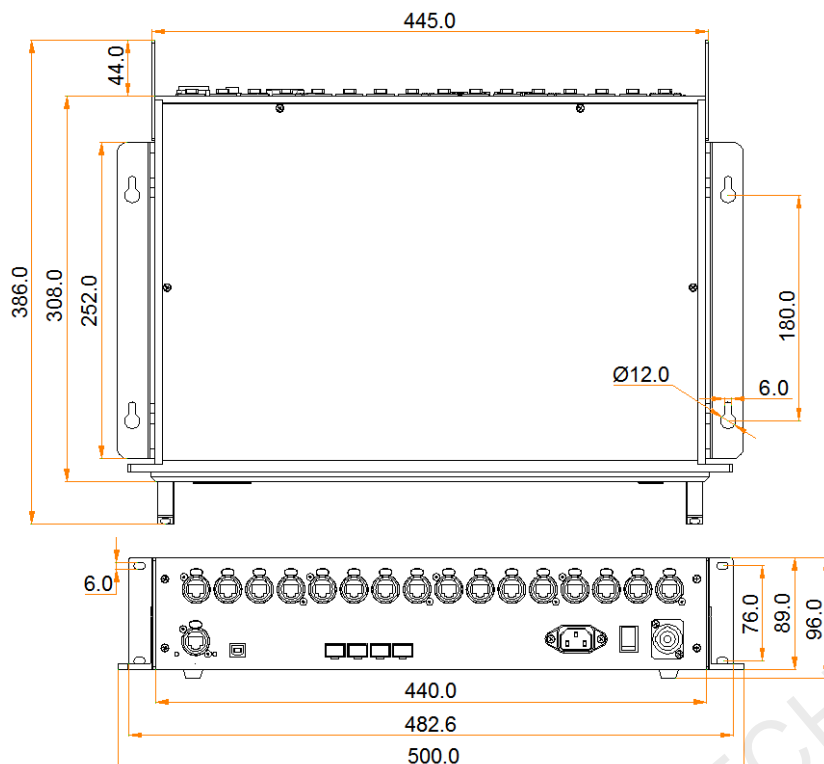
Indicator	Color	Status	Description
PWR	Red	Always on	The power supply is normal.
STAT	Green	Flashing	The device is functioning normally.

## Rear Panel



Input and Output		
OPT1–OPT4	4x optical ports for data input or output OPT1 corresponds to Ethernet ports 1–8 and OPT2 corresponds to Ethernet ports 9–16. OPT3 is the backup of OPT1 and OPT4 is the backup of OPT2.	
	<table border="0"> <tr> <td style="vertical-align: top;"> <p>Description of the optical module:</p> <ul style="list-style-type: none"> <li>• Installed at the factory, hot pluggable</li> <li>• Transmission rate: 9.95 Gb/s to 11.3 Gb/s</li> <li>• Wavelength: 1310 nm</li> <li>• Transmission distance: 10 km</li> </ul> </td> <td style="vertical-align: top;"> <p>Optical fiber selection:</p> <ul style="list-style-type: none"> <li>• Model: OS1/OS2</li> <li>• Transmission mode: Single-mode twin-core</li> <li>• Cable diameter: 9/125 μm</li> <li>• Connector type: LC</li> <li>• Insertion loss: ≤ 0.3 dB</li> <li>• Return loss: ≥ 45 dB</li> </ul> </td> </tr> </table>	<p>Description of the optical module:</p> <ul style="list-style-type: none"> <li>• Installed at the factory, hot pluggable</li> <li>• Transmission rate: 9.95 Gb/s to 11.3 Gb/s</li> <li>• Wavelength: 1310 nm</li> <li>• Transmission distance: 10 km</li> </ul>
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1–16	16x Neutrik Gigabit Ethernet ports for data input or output	
Control		
ETHERNET	Ethernet port for control computer connection	
USB	Type-B USB port for control computer connection	
Power		
AC 100-240V~50/60Hz	Power input connectors, including a 3-pin power socket and a PowerCON socket	

## Dimensions

Tolerance:  $\pm 0.3$  Unit: mm

## Specifications

Electrical Specifications	Input voltage	AC 100 V to 240 V
	Rated power consumption	10 W
Operating Environment	Temperature	-20°C to +60°C
	Humidity	10% RH to 90% RH, non-condensing
Storage Environment	Temperature	-20°C to +70°C
Physical Specifications	Dimensions	500.0 mm × 386.0 mm × 96.0 mm
	Net weight	4.6 kg
Packing Information	Carrying case	530.0 mm × 193.0 mm × 420.0 mm, white cardboard box
	Accessory box	405.0 mm × 290.0 mm × 48.0 mm, white cardboard box Accessories: 1x Power cord, 1x Ethernet cable, 1x USB cable, 10x Screws, 1x Certificate of Approval
	Packing box	550.0 mm × 440.0 mm × 210.0 mm, craft paper box
Certifications	CE, FCC, UL & cUL, EAC, CB, IC	

## 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.

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