CVT4K-S

Fiber Converter

Specifications

Product Version: V1.0.1

Document Number: NS110100433

Trademark

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Statement

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Change History

Version	Release Date	Description
V1.0.1	2018-03-15	• Changed the product images. • Added the features of optical modules. • Added certification information. • Added packaging information.
V1.0.0	2016-10-13	The first release.

Contents

1 Safety

This chapter illustrates safety of the CVT4K-S fiber converter to ensure the product's storage, transport, installation and use safety. Safety instructions are applicable to all personnel who contact or use the product. First of all, pay attention to following points.

- Read through the instructions.
- Retain all instructions.
- Comply with all instructions.

1.1 Storage and Transport Safety

- Pay attention to dust and water prevention.
- Avoid long-term direct sunlight.
- Do not place the product at a position near fire and heat.
- Do not place the product in an area containing explosive materials.
- Do not place the product in a strong electromagnetic environment.
- Place the product at a stable position to prevent damage or personal injury caused by dropping.
- Save the packing box and materials which will come in handy if you ever have to store and ship the product. For maximum protection during storage and shipping, repack the product as it was originally packed at the factory.

1.2 Installation and Use Safety

- Only trained professionals may install the product.
- Plugging and unplugging operations are prohibited when the power is on.
- Ensure safe grounding of the product.
- Always wear a wrist band and insulating gloves.
- Do not place the product in an area having frequent or strong shake.
- Perform dust removing regularly.
- Contact NovaStar for maintenance at any time, rather than have the product disassembled and maintained by non-professionals without authorization.
- Replace faulty parts only with the spare parts supplied by NovaStar.

2 Overview

The CVT4K-S is a high performance fiber converter developed by NovaStar independently. Featuring photoelectric conversion of signals, the CVT4K-S realizes signal transmission via optical fiber and twisted pair. It allows long-distance signal transmission that is stable and not be easily interfered. Being easy to use, the CVT4K-S makes it convenient to connect terminal devices as well as simpler for onsite wiring connections.

3 Features

- Supports 16 Neutrik Ethernet inputs and outputs.
- Supports 4 optical fiber inputs and outputs. Two of them are master inputs and outputs and the other two are the backups.
- Features dual-power redundancy backup inside for more stability and reliability.
- Features 2 types of power connectors (3-pin power socket and PowerCON), satisfying different needs of customers.
- Features various indicators on the front panel, showing device statuses clearly.
- Features USB and Ethernet control connectors, making it more flexible and much easier to connect the control computer.

4 Appearance

Front Panel

Indicators are on the middle area of the front panel:

- **OPT1**/**OPT3** correspond to the indicators of Ethernet ports 1–8. When a green indicator is always on, it denotes that the corresponding port connection works. When a yellow indicator is flashing, it denotes that the corresponding port is transmitting data. When a yellow indicator is always on, it denotes that the corresponding port does not transmit data.
- **PWR**: Power indicator.
- **STAT**: Device status
- **OPT2**/**OPT4** correspond to the indicators of Ethernet ports 9–16. When a green indicator is always on, it denotes that the corresponding port connection works. When a yellow indicator is flashing, it denotes that the corresponding port is transmitting data. When a yellow indicator is always on, it denotes that the corresponding port does not transmit data.
- When the small green triangle indicator is always on, it denotes that the OPT connection works.

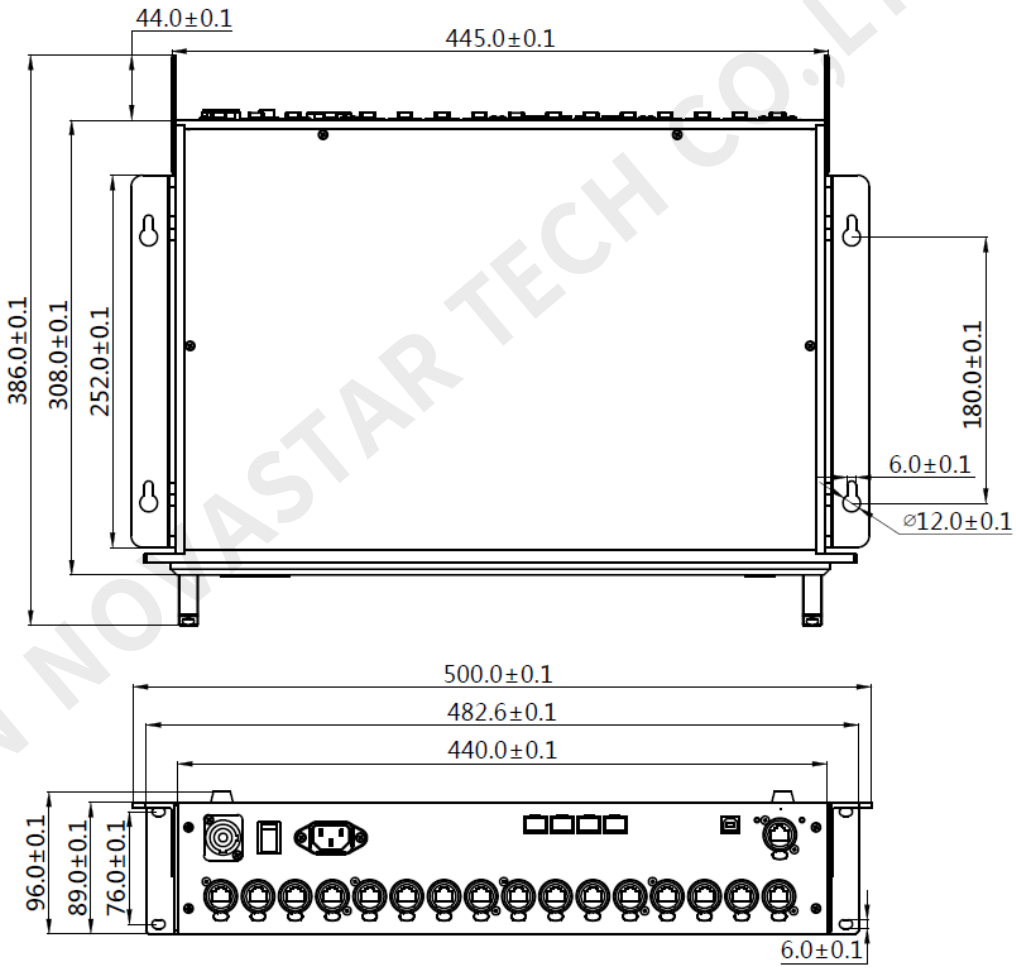
Note:

OPT1 corresponds to Ethernet ports 1–8 and OPT2 corresponds to Ethernet ports 9–16. In addition, OPT3 is the backup of OPT1 and OPT4 is the backup of OPT2.

Rear Panel

Connector Type	Connector Name	Description
Input	OPT1–4	4 × single-mode twin-core LC optical connectors (The optical modules are installed before the product leaves the factory.) Optical module features: • Transmission rate: 9.95 Gb/s–11.3 Gb/s • Hot swappable • Wavelength: 1310 nm • Transmission distance: 10 km
Output	1–16	16 × Neutrik Gigabit Ethernet inputs and outputs
Control	ETHERNET	Connects to PC.
	USB	Cascades devices or connects to PC.
Power	3-pin power socket and PowerCON	100–240 VAC, 50/60 Hz

5 Dimensions



Unit: mm

6 Specifications

Input voltage	100–240 VAC, 50/60 Hz
Rated power consumption	10 W
Operating temperature	–20°C to 60°C
Storage temperature	–20°C to 70°C
Operating humidity	10%–90% RH
Dimensions	500.0 mm × 386.0 mm × 96.0 mm
Net weight	4.6 kg
Certifications	• CE • RoHS • FCC • UL&CUL • EAC • CB • IC
Packing	Each CVT4K-S unit is equipped with a suitcase, an accessory box, and a large carton. Dimensions: • Suitcase: 530 mm × 193 mm × 420 mm, white cardboard box printed with **NOVASTAR**, one unit in a suitcase • Accessory box: 405 mm × 290 mm × 48 mm, white cardboard box printed with **Accessory Box**. Accessories included: GB power cord, Ethernet cable, USB cable, 10×screws, Certificate of Approval. • Carton: 550 mm × 440 mm × 210 mm, craft paper box printed with **NOVASTAR**. Packing: Product and accessory box (containing related wires) packed in the suitcase and the suitcase packed in the large carton.

7 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.