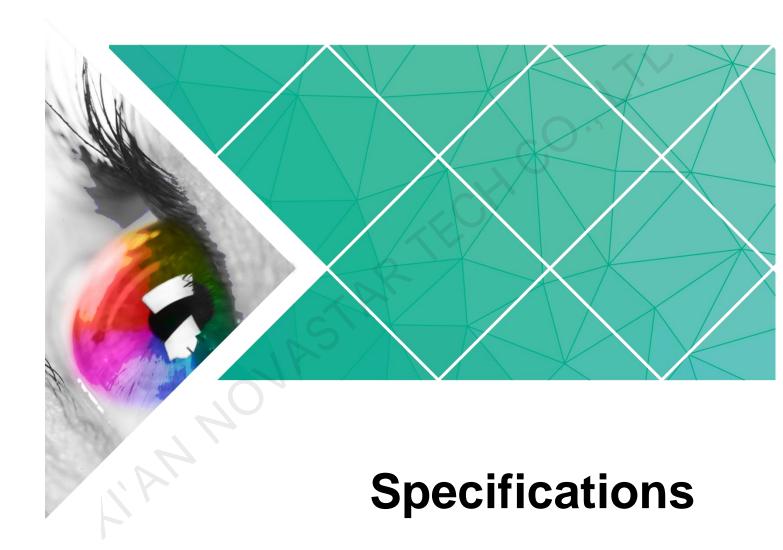


MSD600

Sending Card



Document Version: V2.2.1

Document Number: NS110100866

Copyright © 2019 Xi'an NovaStar Tech Co., Ltd. All Rights Reserved.

No part of this document may be copied, reproduced, extracted or transmitted in any form or by any means without the prior written consent of Xi'an NovaStar Tech Co., Ltd.

Trademark



is a trademark of Xi'an NovaStar Tech Co., Ltd.

Statement

You are welcome to use the product of Xi'an NovaStar Tech Co., Ltd. (hereinafter referred to as NovaStar). This document is intended to help you understand and use the product. For accuracy and reliability, NovaStar may make improvements and/or changes to this document at any time and without notice. If you experience any problems in use or have any suggestions, please contact us via contact info given in document. We will do our best to solve any issues, as well as evaluate and implement any suggestions.

Change History

| Document Version | Release Date | Description |
|------------------|--------------|-------------|
| V2.2.1 | 2019-10-31 | None |

1 Overview

The MSD600 is a sending card developed by NovaStar. It supports video and audio inputs, and sends them to the display after decoding and data processing. The loading capacity of an MSD600 can be up to 1920×1200@60Hz. It communicates with the computer through USB port, which is very convenient.

The MSD600 can be mainly used in fixed and rental applications, such as live events, monitoring centers and various sports centers.

Peatures

2.1 Features

- 1 x DVI input
- 1 × HDMI 1.3 input
- 1 × audio input
- 1 x light sensor connector
- Resolutions up to 1920×1200@60Hz
- 4 x RJ45 Gigabit Ethernet outputs, capacity of each up to 650,000 pixels
- 1 x type-B USB control port
- UART IN and UART OUT control ports for device cascading
- Support for the new generation of NovaStar calibration technology, which is fast and efficient
- Support for a variety of input video formats, as shown in Table 2-1

Note:

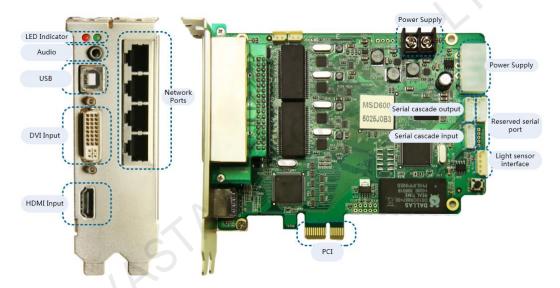
Only one input source can be selected at the same time and it defaults to HDMI.

2.2 Video Formats

Table 2-1 Video formats

| Input Connector | Bit Depth | Sampling Format | Maximum Input Resolution |
|-----------------|-------------|-----------------|--------------------------|
| HDMI 1.3 | 8bit | RGB 4:4:4 | 1920×1200@60Hz |
| | 10bit/12bit | | 1440×900@60Hz |
| DVI | 8bit | | 1920×1200@60Hz |
| | 10bit/12bit | | 1440×900@60Hz |

3 Appearance

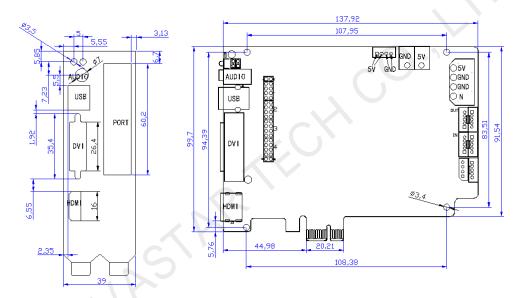


All product pictures shown in this document are for illustration purpose only. Actual product may vary.

| Indicator | | |
|-----------|--|--|
| Green | Device operating indicator. Working status: Flashing slowly: No video input is available. Flashing normally: Video input is available. | |
| | Flashing rapidly: The screen is displaying startup image. Breathing: Ethernet port redundancy has taken effect. | |
| Red | Device power indicator. Working status:On: The power supply is normal.Off: The power is not supplied, or the power supply is abnormal. | |
| Input | | |
| DVI IN | Single link DVI connectorResolutions up to 1920×1200@60Hz | |

| | Custom resolutions supported: | | |
|----------------|--|--|--|
| | Resolution limit with maximum width: 3840×600@60Hz | | |
| | Resolution limit with maximum height: 800×2560@60Hz | | |
| | Resolution imit with maximum neight. 800x2580@80H2 | | |
| HDMI IN | HDMI 1.3 compliant | | |
| | Resolutions up to 1920×1080@60Hz | | |
| | Custom resolutions supported: | | |
| | Resolution limit with maximum width: 3840×600@60Hz | | |
| | Resolution limit with maximum height: 800×2560@60Hz | | |
| | HDCP compliant | | |
| AUDIO | Audio input connector | | |
| Output | | | |
| RJ45 × 4 | Four RJ45 Gigabit Ethernet outputs | | |
| | Capacity of each output up to 650,000 pixels | | |
| | Redundancy between Ethernet ports supported | | |
| Functionality | | | |
| LIGHT SENSOR | Connect to light sensor to monitor ambient brightness to allow for automatic screen brightness adjustment. | | |
| Control | | | |
| USB | USB control port to connect to PC | | |
| UART IN | Input port to cascade devices | | |
| UART OUT | Output port to cascade devices | | |
| 1. | Up to 20 sending cards can be cascaded. | | |
| Power | | | |
| DC 3.3 V-5.5 V | AC power connector | | |

4 Dimensions



Unit: mm

5 Specifications

| Electrical Parameters | Input voltage | DC 3.3 V-5.5 V |
|----------------------------|-------------------------|---|
| | Rated current | 0.75 A |
| | Rated power consumption | 3.5 W |
| Operating Environment | Temperature | -20°C to +75°C |
| | Humidity | 0% RH to 90% RH, non-condensing |
| Physical Specifications | Dimensions | 137.9 mm × 99.7 mm × 39.0 mm |
| | Net weight | 135.0 g |
| Packing Information | Carrying case | 335 mm × 190 mm × 62 mm, craft paper box |
| | Accessory box | 400 mm × 365 mm × 355 mm, craft paper box |
| | | Accessories: |
| | | 1 × power cord |
| | | 1 x USB cable |
| | | 1 x DVI cable |
| Certifications | EMC, RoHS, PFoS, FCC | |

6 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.