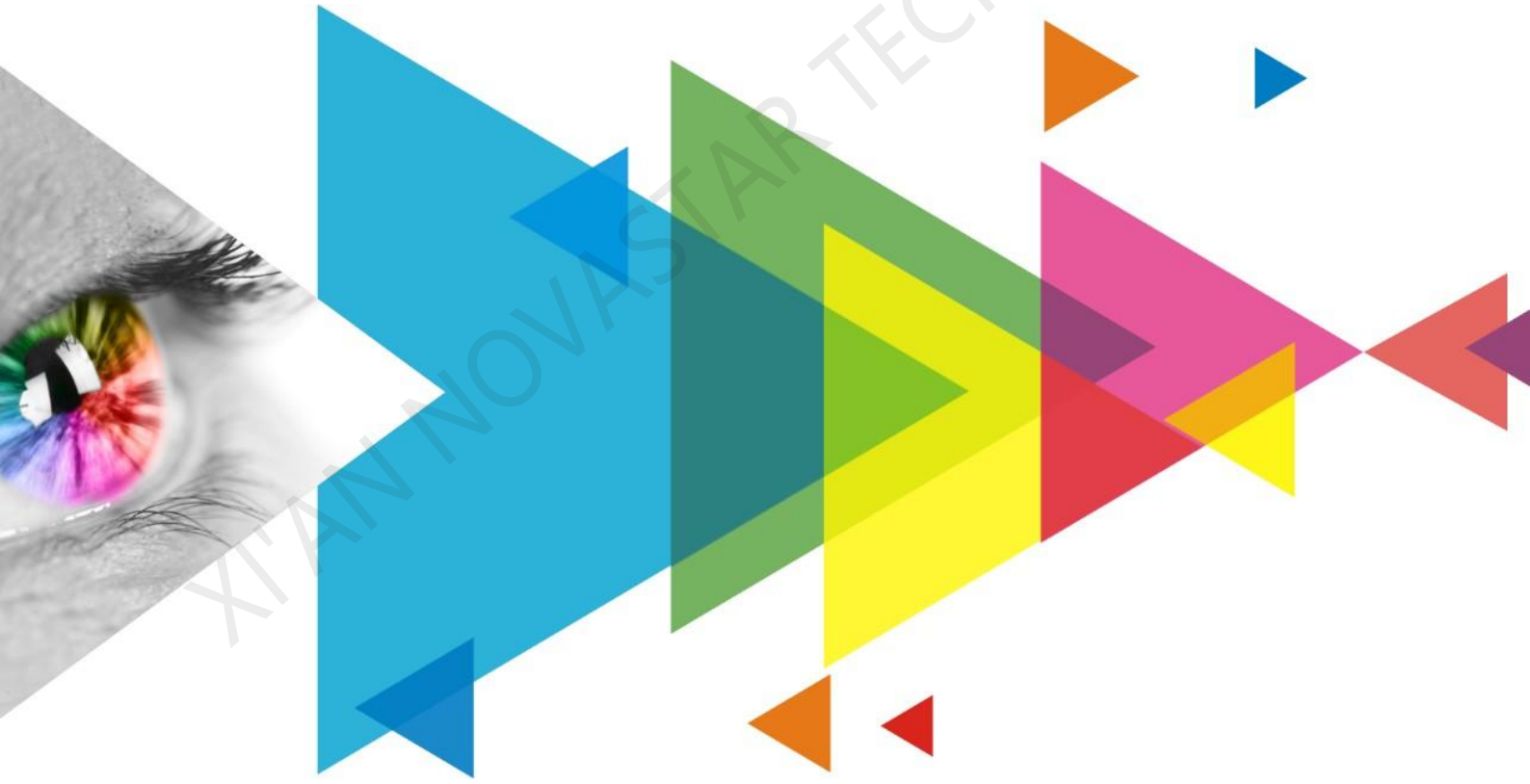
Buy website address:https://reissopto-led.com/products/novastar-mrv216-data-receiving-card-for-led-screen

MRV216

Receiving Card

V1.1.1



Specifications

Change History

Document Version	Release Date	Description
V1.1.1	2020-09-11	• Optimized the feature description. • Optimized the legends in the appearance diagram. • Optimized the indicator description. • Optimized the dimensions diagram.
V1.1.0	2020-04-10	• Updated the maximum loading capacity. • Updated the feature description.
V1.0.0	2020-01-06	First release

Introduction

The MRV216 is a general receiving card developed by NovaStar. A single MRV216 loads up to 512×384 pixels (NovaLCT V5.3.0 or later required). Supporting various functions such as the brightness calibration, quick adjustment of dark or bright lines, 3D, and individual Gamma adjustment for RGB, the MRV216 can greatly improve the display effect and user experience.

The MRV216 uses 16 standard HUB75E connectors for communication, resulting in high stability. It supports up to 32 groups of parallel RGB data and is suitable to various on-site setups.

Features

Improvements to Display Effect

- Brightness calibration
  Working with NovaLCT and NovaCLB, the receiving card supports brightness calibration on each LED, which can greatly improve LED display brightness consistency, allowing for better image quality.
- Quick adjustment of dark or bright lines
  The dark or bright lines caused by splicing of modules and cabinets can be adjusted to improve the visual experience. The adjustment can be easily made and takes effect immediately.
- 3D function
  Working with the sending card that supports 3D function, the receiving card supports 3D image output.
- Individual Gamma adjustment for RGB
  Working with NovaLCT (V5.2.0 or later) and the sending card that supports this function, the receiving card supports individual adjustment of red Gamma, green Gamma and blue Gamma, which can effectively control image non-uniformity under low grayscale and white balance offset, allowing for a more realistic image.

Improvements to Maintainability

- Mapping function
  The cabinets display the receiving card number and Ethernet port information, allowing users to easily obtain the locations and connection topology of receiving cards.
- Temperature and voltage monitoring
  The temperature and voltage of the receiving card can be monitored without using peripherals.
- Bit error rate monitoring
  The Ethernet port communication quality of the receiving card can be monitored and the number of erroneous packets can be recorded to help troubleshoot network communication problems.

  NovaLCT V5.2.0 or later is required.
- Firmware program readback
  The receiving card firmware program can be read back and saved to the local computer.

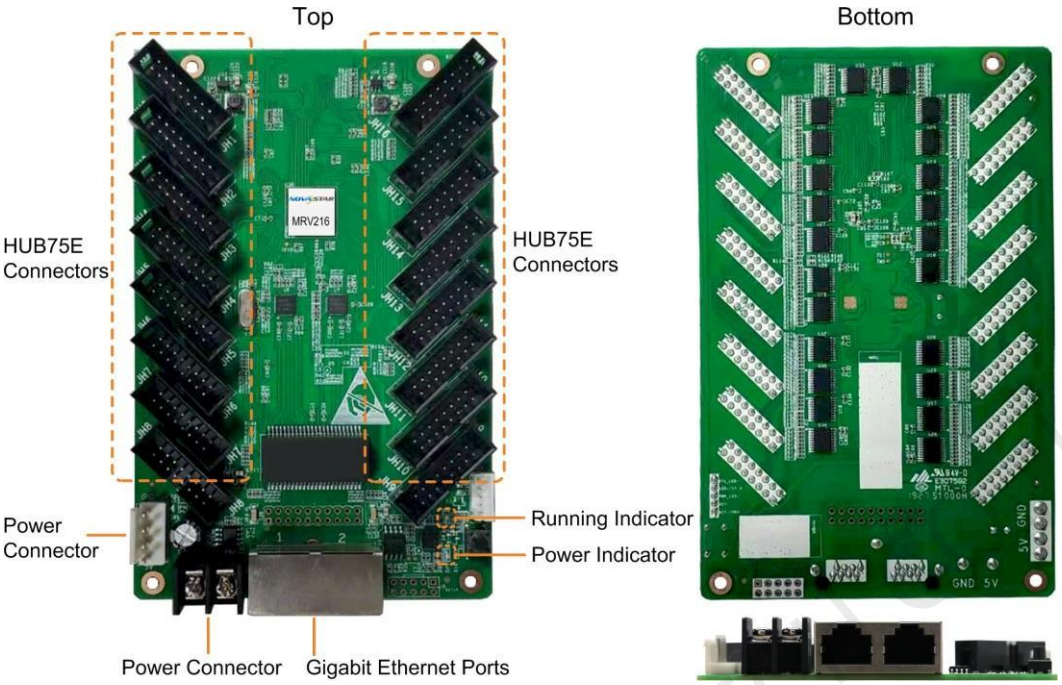
  NovaLCT V5.2.0 or later is required.
- Configuration parameter readback
  The receiving card configuration parameters can be read back and saved to the local computer.

Improvements to Reliability

- Loop backup
  The receiving card and sending card form a loop via the main and backup line connections. If a fault occurs at a location of the lines, the screen can still display the image normally.
- Dual backup of the application program

Two copies of the application program are stored in the receiving card at the factory to avoid the problem that the receiving card may get stuck due to program update exception.

Appearance



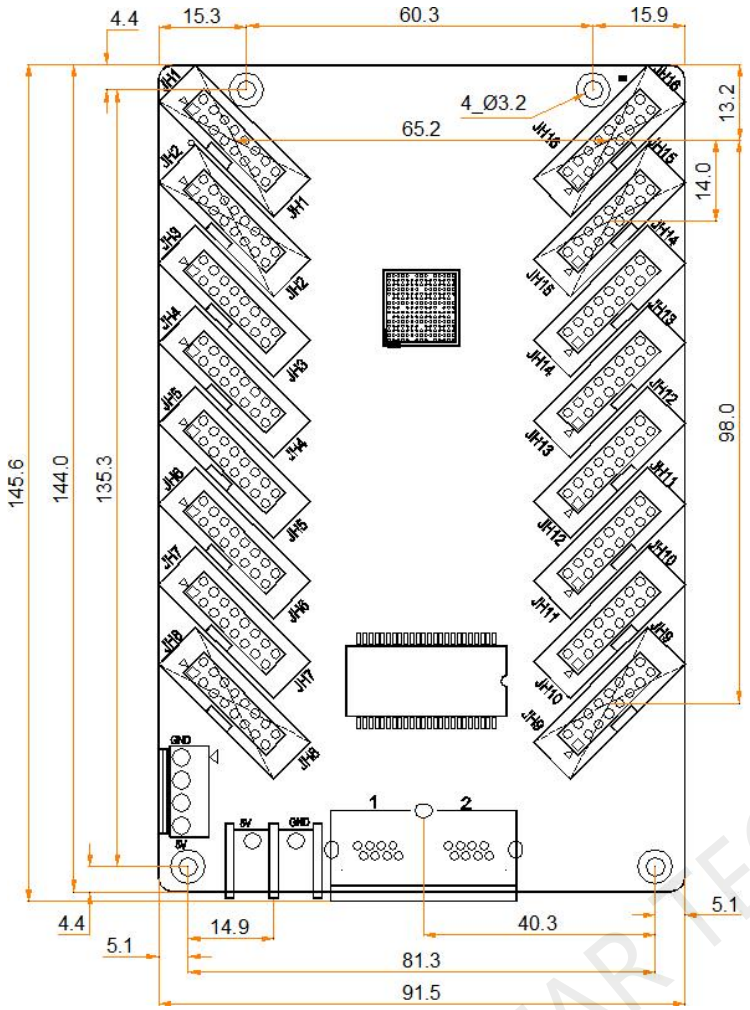
All product pictures shown in this document are for illustration purpose only. Actual product may vary.

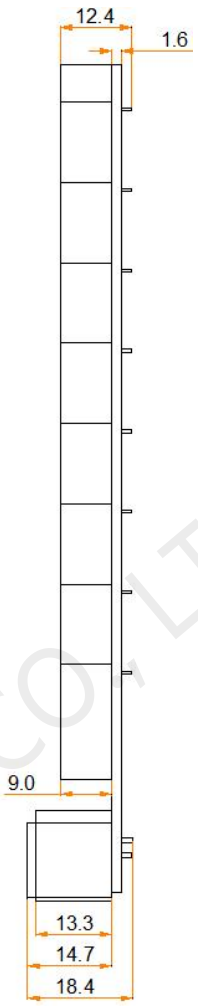
Indicators

Indicator	Color	Status	Description
Running indicator	Green	Flashing once every 1s	The receiving card is functioning normally. Ethernet cable connection is normal, and video source input is available.
		Flashing once every 3s	Ethernet cable connection is abnormal.
		Flashing 3 times every 0.5s	Ethernet cable connection is normal, but no video source input is available.
		Flashing once every 0.2s	The receiving card failed to load the program in the application area and now is using the backup program.
		Flashing 8 times every 0.5s	A redundancy switchover occurred on the Ethernet port and the loop backup has taken effect.
Power indicator	Red	Always on	The power supply is normal.

Dimensions

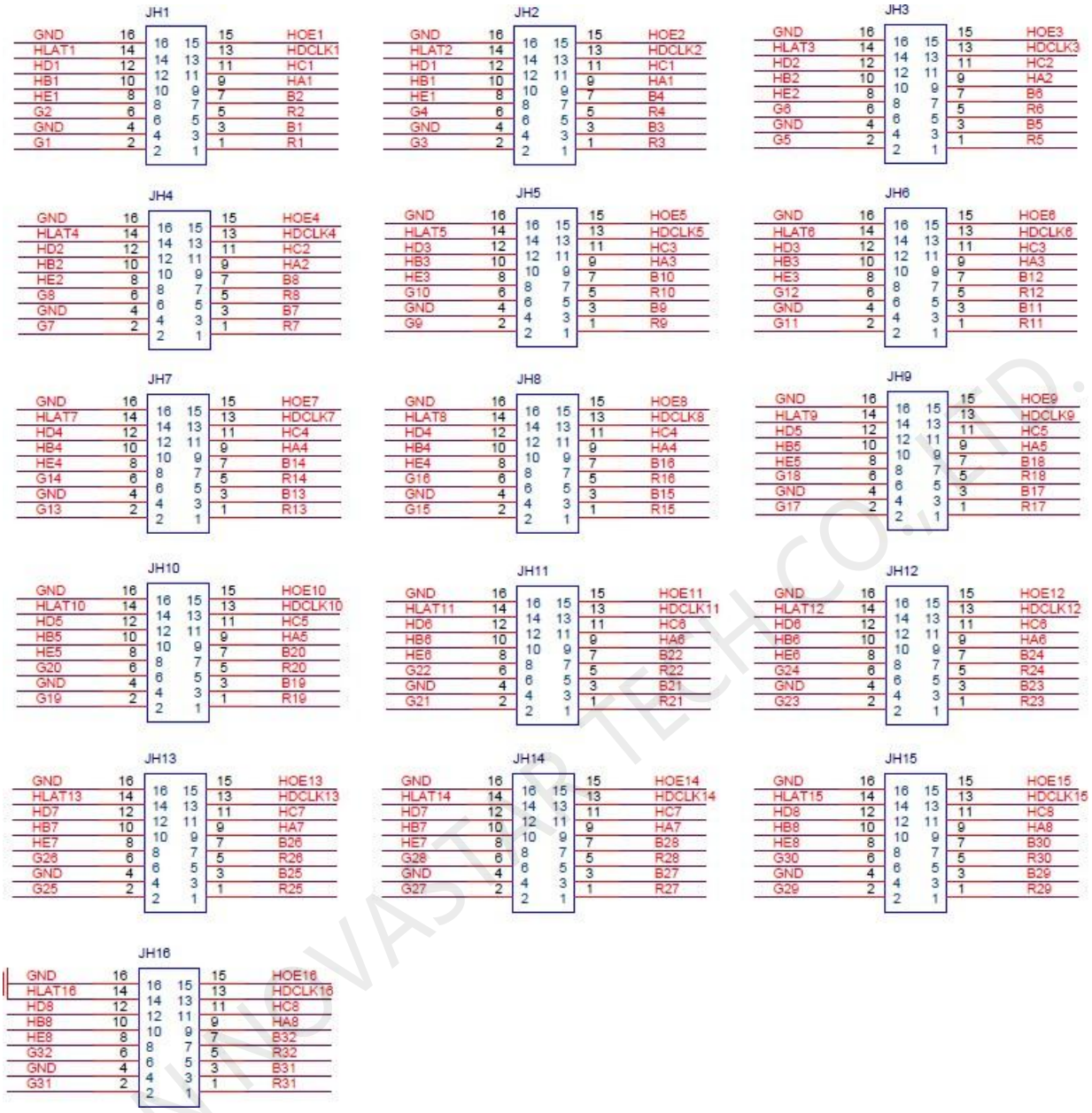
The board thickness is not greater than 2.0 mm, and the total thickness (board thickness + thickness of components on the top and bottom sides) is not greater than 19.0 mm. Ground connection (GND) is enabled for mounting holes.





Tolerance: ±0.1 Unit: mm

Pins



Pin Definitions					
Ground	GND	16	15	HOE	Display enable
Latch signal	HLAT	14	13	HDCLK	Shift clock
Line decoding signal	HD	12	11	HC	Line decoding signal
	HB	10	9	HA	
	HE	8	7	B	/
/	G	6	5	R	/
Ground	GND	4	3	B	/
/	G	2	1	R	/

Specifications

Maximum Loading Capacity	PWM IC: 512 × 384 pixels Common IC: 384 × 384 pixels	
Electrical	Input voltage	DC 3.3 V to 5.5 V

Specifications	Rated current	0.5 A
	Rated power consumption	2.5 W
Operating Environment	Temperature	–20°C to +70°C
	Humidity	10% RH to 90% RH, non-condensing
Storage Environment	Temperature	–25°C to +125°C
	Humidity	0% RH to 95% RH, non-condensing
Physical Specifications	Dimensions	145.6 mm × 91.5 mm × 18.4 mm
	Net weight	100.1 g
Packing Information	Packing specifications	An antistatic bag and anti-collision foam are provided for each receiving card. Each packing box contains 100 receiving cards.
	Packing box dimensions	650.0 mm × 500.0 mm × 200.0 mm
Certifications	RoHS, EMC Class A	

The amount of current and power consumption may vary depending on factors such as product settings, usage, and environment.

Trademark

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Statement

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