



# Specification

## NovaStar LED Display Controller S1

Rev1.0.0 2017/07/26

# Overview

With multiple I/O and control interfaces, controller S1 is ideal for different applications. It has higher data transmission bandwidth. One coaxial cable can support 1920×1080@60Hz making the LED display connection simpler. Benefiting from the SerDes technology, controller S1 has lower frame latency and is especially designed for high-end LED display applications.

# Features

- The inputs of the S1 include 3G-SDI×1, HDMI×1, DVI×1 and support input resolutions up to 1920×1080@60Hz.
- The outputs of the S1 include BNC×2 pairs.
- Low latency feature, the whole system including S1 and TR100 only 1 frame.
- The loading capacity: 2.3 million pixels.
- Capable of cascading multiple controllers to load a large screen.
- Support pixel-level calibration technology.
- The system can be configured with a knob and a button on the front panel. Computer software for system configuration is not necessary.
- The OLED display makes operations much easier.
- Support the hardware backup solution.

# Appearance

**Rear panel**



<b>Inputs</b>	DVI×1	<ul style="list-style-type: none"> <li>▪ Single-link DVI</li> <li>▪ User-defined resolution settings Horizontal resolution up to 3840 pixels Vertical resolution up to 3840 pixels</li> </ul>
	HDMI×1	<ul style="list-style-type: none"> <li>▪ Standard HDMI 1.4 Input</li> <li>▪ Supports 8-bit/12-bit</li> </ul>

		For 8-bit, support for RGB 4:4:4 1080P For 12-bit, support for YCbCr 4:2:2 1080P.
	SDI×1	<ul style="list-style-type: none"> <li>▪ Supports 3G-SDI</li> <li>▪ SDI Loop</li> </ul>
<b>Outputs</b>	BNC×4	<ul style="list-style-type: none"> <li>▪ 2-channel outputs and 2-channel inputs, with each pair channel supporting bandwidth up to 3.25G.</li> <li>▪ The loading capacity of one pair channel is up to 1920X1080@60Hz. Of the two pairs channels, one is primary and the other is backup.</li> <li>▪ Supports low latency. The maximum delay of the system is 1 frame. The maximum transmission distance of the coaxial cable is 100 meters.</li> </ul>
<b>GenLock</b>	BNC×2	<ul style="list-style-type: none"> <li>▪ Supports GenLock IN &amp; LOOP</li> </ul>
<b>Control</b>	RS232(Baud rate 115200Bps)/ USB(cascading) / RJ45 (TCP/IP)	
<b>Power Requirements</b>	Operating voltage	100V-240V AC@50/60Hz
	Operating current	1.5A
	Power	20W
<b>Dimensions &amp;Weight</b>	Space requirements	1RU
	Size(mm)	482.6X288.5X45
	Weight	2.55 Kg
<b>Operating Environment</b>	Temperature	-4°F-140°F (-20°C-60°C)
	Humidity	10%-90% non-condensing