## LM-F1616

3S seamless switching splicing series



## Characteristic

LF-F1616 is a splicing and seamless matrix with flexible configuration. This series of matrix adopts high-performance hardware design, perfectly supports all kinds of high-definition digital/analog signal switching processing, and supports bidirectional RS-232, bidirectional IR signal distribution switching function. But also can divide a complete image signal into a plurality of signals, distribute the signals to a plurality of display units, and simultaneously form a large display screen to display dynamic pictures.

- Pure hardware FPGA architecture, full modular design, independent development of Video-SerDes technology, full digital switching, picture switching to achieve senseless conversion effect, no black screen, no freezing phenomenon.
- The output of each splicing card supports any MXN splicing, the mapping management and wiring are simple, the simultaneous management of no less than 5 groups of splicing walls is supported, and the screen supports any window opening, roaming and drag switching.
- The front panel supports key control, infrared remote control (optional) and LCD status display, and supports direct viewing and modification of IP information.



- The front panel can be designed with a 5.0-inch touch screen, which can switch and set the product. (Optional)
- Support dual control card control. The main control card can realize network control. When the main control card fails, the standby control card can be used for network control.
- Support the backup function of audio and video main and standby channels. The relationship between the main and standby channels can be set arbitrarily. After the audio and video signals of the main channel are disconnected, it will automatically switch to the standby channel to achieve dual signal protection.
- Support matrix polling/matrix pre-cut/global partition function, which is more convenient for customer operation and partition management.
- Each splicing output card can realize the video wall splicing function, and the image window can be zoomed arbitrarily in the full screen range.
- Support the hot plug of input/output card or control card. The change does not affect the work of the equipment. It is convenient for maintenance. It supports the synchronous switching of audio and video.
- Network port input and output signals support embedded (or local) bidirectional RS-232 signals, and can be switched with video signals, or separate switching mode, and support POC external power supply.
- Flexible control mode, with LCD status key panel, RS485, RS-232 communication interface and network port; Support graphical and statement programming.
- Support the maximum input and output resolution up to 4Kx2K @ 60HZ YUV4: 4:4 UHD.
- Support redundant power supply to ensure stable operation of equipment. (Optional)
- Timeline and multi-thread event editing functions.
- Card-type structure design, flexible configuration of input and output signal types and number of signal channels.
- Support central control firmware update.
- The host supports the touch key panel interface of KEYBOARD protocol and supports remote POE power supply. Only a single network cable is needed to connect to the key panel. The channel can

| be switched arbitrarily through the key panel, and the interface can be customized. (With advanced control card and touch key panel) |
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| • Built-in Wed server, mobile phone, tablet, computer can directly log in the web page to control the splicing matrix. (Optional)    |
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- Data transmission core processing chip with high-definition processing capability, no less than 10.2Gps/s, 4K resolution (supporting resolution 3840X2160 @ 60HZ), no compression and no loss in switching and distribution transmission.
- Optional APP software can be controlled by mobile phone, tablet and computer, and the APP interface can be programmed arbitrarily; APP supports Hongmeng, Linux, Windows, Apple IOS and other systems. (Optional Advanced Control Card)
- 4K @ 60 4:4:4 transmission.
- 4K/2K seamless switching: 4K60 output card, 4K30 output card and 1080p output card can be mixed. Seamless switching.
- EDID management: Support reading, modification and customization of EDID to improve the compatibility of display devices.
- 4K60Hz HDBaseT transmission: support 4K60Hz transmission up to 70m.
- Network control, RS232 control: support third-party central control, PC software control.
- Freezing and stilling of the output screen: support the functions of setting the screen still and releasing the still for the output channel.
- Web page control: cross-platform, smart device browser control.
- Hot plug: The board supports hot plug, which is convenient for replacement or upgrade, and improves the maintainability of the equipment.



## **Quality Assurance:**

- 1. Electrostatic test: ESD test is performed at up to 15,000 volts according to the EN/IEC 61000-4-2 standard. This ensures that the product is not subject to electrostatic shock.
- 2. Environmental test: test the storage temperature ( $-20 \degree C$  to  $+70 \degree C$ ) and operating temperature ( $0 \degree C$  to  $+50 \degree C$ ) of the product. It can be seen that our products can be successfully used in installations around the world and withstand a wide range of temperatures. Testing products at 5% to 85% non-condensing relative humidity ensures that temperature and humidity do not affect operation when the solution is installed in any environment.
- 3. Electrical Tests: Products will be subjected to a series of electrical tests, including reverse polarity, minimum and maximum operating voltages, and "brown-out" conditions. External tests are performed in accordance with UL or IEC 60950 operating standards.

