

MODELS

	F8	F4	F4 Lite
Input Card Slots	8	8	8
Output Card Slots	8	6	6
AUX Card Slots	1	1	1
Layers <i>(No Multiviewer)</i>	64x SL mixing layers, 32x DL mixing layers, or 16x 4K mixing layers	48x SL mixing layers, 24x DL mixing layers, or 12x 4K mixing layers	40x SL mixing layers, 20x DL mixing layers, or 10x 4K mixing layers
MVR Connectors	2	2	2
Input View	Via Ethernet cable	Via Ethernet cable	Via DVI/HDMI cable
Presets	128	128	128
BKG Storage	512 MB	512 MB	512 MB
LOGO	16	16	16
Control	Triton CUI-based event management software designed for flex-view series switchers U3 Large-scale event controller engineered for flex-view series switchers		
Processing	FPGA-based Apollo image processing architecture Real 4K60p 4:4:4 8-bit video processing		
Front Screen	7" Touchscreen	7" Touchscreen	3.5" LCD
Ethernet Port	100M	100M	100M
Dimensions	Without handles, rack ears & rack mount L 482.6 × P 354.9 × H 515.5 mm W 19 × D 14 × H 20.3 inches  With handles, rack ears & rack mount L 482.6 × P 361.4 × H 543.5 mm W 19 × D 14.2 × H 21.4 inches	Without handles, rack ears & rack mount L 482.6 × P 515 × H 212.2 mm W 19 × D 20.2 × H 8.4 inches  With handles, rack ears & rack mount L 482.6 × P 546.5 × H 228.2 mm W 19 × D 21.5 × H 9.0 inches	Without handles, rack ears & rack mount L 482.6 × P 515 × H 212.2 mm W 19 × D 20.2 × H 8.4 inches  With handles, rack ears & rack mount L 482.6 × P 546.5 × H 228.2 mm W 19 × D 21.5 × H 9.0 inches
Weight	Fully loaded without accessories 39.1 kg / 86.2 lbs  Fully loaded with accessories & flight case 67.5 kg / 148.8 lbs	Fully loaded without accessories 30.3 kg / 66.8 lbs  Fully loaded with accessories & flight case 50.3 kg / 110.9 lbs	Net weight without accessories 25 kg / 55.12 lbs  Shipping weight with accessories 50 kg / 105.82 lbs
Electric Parameters	Power connector: 100–240V~, 50/60Hz, 10A–5A Max power consumption: 700 W	Power connector: 100–240V~, 50/60Hz, 10A–5A Max power consumption: 600 W	Power connector: 100–240V~, 50/60Hz, 10A–5A Max power consumption: 450 W
Noise on Average <i>(@1, 0.75m height)</i>	55 dB	53 dB	53 dB
Operating Temperature	0°C to 45°C	0°C to 45°C	0°C to 45°C
Operating Humidity	0% to 85%, non-condensing	0% to 80%, non-condensing	0% to 80%, non-condensing
Certifications	CE, FCC, IC, RoHS	CE, FCC, IC, RoHS	CE, FCC, IC, RoHS
Packing Information	1x Grounding cable 1x Ethernet cable 1x USB cable 1x USB drive 1x Phillips screwdriver 2x Power cords (Optional) 1x Flight case (Optional) 1x Quick Start Guide 1x Customer Letter 1x Safety Manual 1x Certificate of Approval	1x Grounding cable 1x Ethernet cable 1x USB cable 1x USB drive 1x Phillips screwdriver 2x Power cords (Optional) 1x Flight case (Optional) 1x Quick Start Guide 1x Customer Letter 1x Safety Manual 1x Certificate of Approval	1x Grounding cable 1x Ethernet cable 1x USB cable 1x USB drive 1x Phillips screwdriver 2x Power cords (Optional) 1x Flight case (Optional) 1x Quick Start Guide 1x Customer Letter 1x Safety Manual 1x Certificate of Approval



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F Series


Flagship Flex-View Event Presentation Switchers




HDMI




HDCP 2.2




DP 1.2




12G-SDI




OPTICAL FIBER



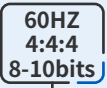
MULTIVIEWER




USER KEY




MODULAR




60HZ  
4:4:4  
8-10bits




4K@60HZ




UP TO 16  
4K INPUTS




UP TO 8  
4K OUTPUTS




HDR



EDGE BLEND



DUAL-POWER

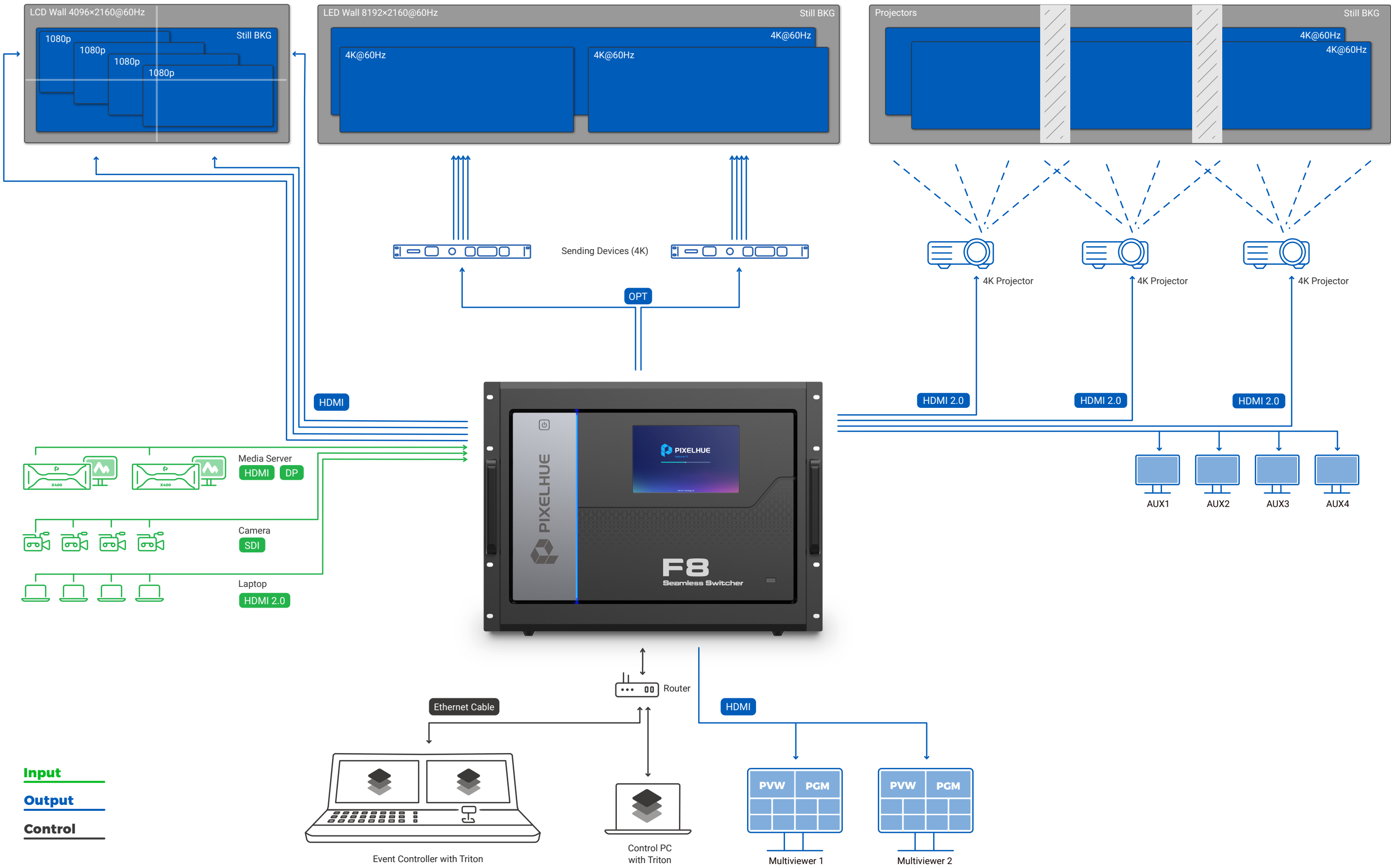


FLEXIBLE  
MIXED LAYERS

Powerful Presentation Switchers 48 megapixel, true 4K@60Hz



APPLICATION







# FEATURES



## Highest Performance

PIXELHUE's Flex-View Event Presentation Switchers are specifically designed for easy management of multiple displays for shows or visual management systems, suitable for use with a variety of input formats and multiple display outputs.

Designed with the latest high-performance FPGA Chipset, this series of switchers deliver reliable, stable, faster, and better image performance, and output non-compressed 4k@60Hz 4:4:4 10bits videos. Built with a focus on environmental protection, the PIXELHUE-designed foundation is a great long-term solution, simplifying upgrades through modules for future use.

What's better, the switchers feature the support for projectors and irregularly shaped displays.



## Ultimate Flexibility Through Modular Design

The Flex-View Event Presentation Switchers are designed with up to 8 input slots and 8 output slots, allowing you to easily select I/O modules with different input and output connectors to match the your visual system requirements. The module design allows for easy deployment and upgrade in the field, bringing more convenience and ease your on-site applications.

In addition, the switchers support at most 64x SL mixing layers, 32x DL mixing layers or 16x 4K mixing layers, and also support a variety of input and output connectors, including DVI, DP, HDMI, and 3G-SDI connectors, allowing for easy customization for any project or show.

## Key Features

- Based on Apollo pure FPGA architecture
- Modular design, field-swappable I/O cards, power supplies and main control card
- Removable and swappable dual power supplies
- Up to 32x 2K60p inputs and 32x 2K60p outputs
- True 4K60p 4:4:4 10 bit video processing
- Removable and swappable I/O cards
- Field-installable I/O cards to provide a variety of connectivity possibilities
- Up to 64x SL mixing layers, 32x DL mixing layers or 16x 4K mixing layers
- Cross-connector layer does not occupy layer resources, full screen roaming
- BKG and LOGO management
- Input and PGM view on an auxiliary output
- Custom layout of output connectors
- Support for virtual pixels
- Luma key and chroma key
- 2x MVR outputs with flexible layouts, adjustable borders and UMD



## Outstanding Onsite Stability by Backup Solution

The onsite stability and reliability is crucial to all the events. How to safeguard your event and make your display not go bad? PIXELHUE brings its own backup solution to make sure your event is a success. Through both the signal backup and device backup mechanisms, whenever the signal source or device fails, the backup one will take over the job seamlessly and you will feel nothing has changed.



## Total Event Control with U3 Controller

The U3 event controller has built-in an exceptional video processing software Triton, which provides the offline mode and pre-editing functionality, and helps you directly import while on-site and migrate between different devices. The easy-to-master and user-friendly graphical user interface guides you from beginning to end of any events with as little complex operation as possible. With the U3 event controller, the switchers can satisfy any kind of event requirements such as stage performance, high-end auto shows, TV program recording, product launch events, or any kind of large-scale exhibitions.



## Reliable & Worry-Free Operation

In this rapidly evolving market, reliable technology is the key to an outstanding event. Our switchers allow you to configure the system to accommodate a variety of connectivity arrangements and display requirements. The switchers feature dual power supplies, full machine data backup to local configuration, fast restoration, and working perfectly 24/7. What's more, the switchers have passed a series of rigorous drop tests, shock & vibration tests and thermal tests, ensuring they can survive in any kind of road trips or event environment.

- Input sync with Genlock; Genlock accepts bi-level or tri-level signals
- Live input view in Triton
- Custom timing and frame rates on outputs
- AOI function
- Input EDID management, including standard resolution, custom resolution and advanced resolution settings
- Project file for data backup and restore
- Auto report on input and output statuses
- Adjustable layer mask and border
- Layer flipping, copying and mirroring
- Output connector copying
- Output mapping to enable easier screen configuration
- Full-link HDCP for safer content transmission
- Multiple switchers controlled by a single U3 simultaneously
- Batch change of frame rates of output connectors
- Clear indication of sync signal statuses
- Independent R, G and B adjustments of brightness and contrast
- Optimized parameter adjustments of test patterns



## Technical Features

### Inputs

- Standard, custom and advanced EDID settings  
Common resolutions: 1920×1080p@60Hz, 3840×1080p@60Hz and 3840×2160p@60Hz, etc.
- Input source deinterlacing processing
- Input source cropping

### Outputs

- Standard, custom and advanced output timing settings
- Output width can be up to 8192 pixels, better choice for LED applications

### Multiviewer Outputs

- Two dedicated output connectors configured as MVR connectors, with a fixed resolution of 1920×1080p@60Hz
- Monitor all inputs and screens (PVW and PGM)
- UMD display and color adjustment
- MVR background color adjustment
- Customizable layouts for easy use
- Border adjustment for MVR window

### AUX

- AUX screens supported  
AUX connector can be in independent or mosaic use
- AUX screen can follow the preset switching
- Free view of inputs and screens (PGM)

### Screens

- Outputs configured as single screens or edge-blended widescreens
- Bezel compensation and edge blending
- Irregular screen mosaic and output AOI function, ideal for complex and irregular LED screen applications
- Dedicated BNC with loop-through for Genlock to ensure a synchronized output
- Virtual pixels supported
- Up to 128 presets

### Transition and Effect

- PVW to PGM via Take, Cut or T-bar operation
- Fade transition
- Customizable transition durations
- Copy or swap display on PVW and PGM

### Layers

- Each output card supports up to 8x SL mixing layers, 4x DL mixing layers or 2x 4K mixing layers
- Full screen roaming supported
- Fade and cut transitions on all layers
- Adjustable layer mask and border with different border effects
- Layer flipping, copying and mirroring
- Pure color layer can be used as background

### BKG & LOGO

- BKG can be either a captured or imported image
- Unlimited BKG quantity in 512 MB storage space
- Imported LOGO images supported
- Independent BKG and LOGO for each screen
- BKG filling the whole screen by default

### Processing

- High quality scaling engine
- Low latency processing
- Compliant with HDCP 1.4 and HDCP 2.2

### Control

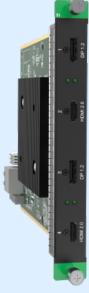
- Intuitive control via U3 event controller
- Dual control modes, U3 event controller and control PC

### Others

- Free conversion between HDR10, HLG and SDR
- User keys (containing layer properties such as size, position, border color, etc.) for more convenient and fast layer properties configuration


# MODULAR

## Inputs



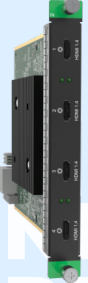
**Dual 4K HDMI2.0/DP1.2 Input Card**  
**2x DP 1.2**  
**2x HDMI 2.0**

- DP 1.2: HDCP 1.3 compliant
  - Up to 4096×2160@60Hz/8192×1080@60Hz 4:4:4 10-bit
- HDMI 2.0: HDCP 2.2 and HDCP 1.4 compliant
  - Up to 4096×2160@60Hz 4:4:4 8-bit
- Only one of the HDMI 2.0 or DP 1.2 can run simultaneously with that in the other parallel group  
(Group 1: Connectors 1 & 2.  
Group 2: Connectors 3 & 4)
- Capacity switching between SL, DL and 4K
- EDID management for VESA, and CVT compliant user timings
- Common resolutions
  - 1920×1080p@30/48/50/59.94/60Hz
  - 3840×1080p@30/50/59.94/60Hz
  - 3840×2160p@30/50/59.94/60Hz




**12G-SDI Input Card**  
**2x 12G-SDI or 4x 3G-SDI or 1x 12G-SDI + 2x 3G-SDI**

- 12G-SDI:
  - Downward compatible with 6G-SDI, 3G-SDI, HD-SDI and SD-SDI
  - Connectors 1 and 3 are available
- 3G-SDI:
  - Downward compatible with HD-SDI and SD-SDI
  - Four connectors are available
- Deinterlacing by default
- Common resolutions  
12G-SDI:
  - 720×480i@59.94Hz
  - 720×576i@50Hz
  - 1920×1080i@50/59.94/60Hz
  - 3840×2160p@23.98/24/25/29.97/30/50/59.94/60Hz  
3G-SDI:
  - 720×576i(PAL)@50Hz
  - 720×480i(PAL)@59.94Hz
  - 1920×1080i@50/59.94/60Hz



**HDMI1.4 Quad Input Card**  
**4x HDMI1.4**

- HDCP 1.4 compliant
  - SL: Up to 2048×1080@60Hz 4:4:4 8-bit
  - DL: Up to 3840×1080@60Hz 4:4:4 8-bit
- EDID management for VESA, and CVT compliant user timings
- Common resolutions
  - 1920×1080p@30/48/50/59.94/60Hz
  - 3840×1080p@30/50/59.94/60Hz



**3G-SDI Quad Input Card**  
**4x 3G-SDI**


- Downward compatible with SD-SDI and HD-SDI
- Bi-level at SD and Tri-level at HD
- Deinterlacing by default
- Support for SMPTE 425-1, 2048-2, 296M, 292M and 259M
- Common resolutions
  - 720×576i(PAL)@50Hz
  - 720×480i(PAL)@59.94Hz
  - 1920×1080i@50/59.94/60Hz

## Outputs



**3G-SDI Quad Output Card**  
**4x 3G-SDI**

- Downward compatible with HD-SDI and SD-SDI
- Support for ST-424 (3G), ST-292 (HD) and SMPTE259 SD
- Under 1920×1080@50/59.94/60Hz, Level A and Level B adjustment supported
- Support for interlaced signal timing settings
- Connector copying supported  
Connectors 2 and 4 are active, while connectors 1 and 3 copy the outputs on connectors 2 and 4 respectively
- Common resolutions
  - 720×480i (NTSC)@59.94Hz
  - 720×576i (PAL)@50Hz
  - 1280×720p@23.98/24/25/29.97/30/50/59.94/60Hz
  - 1920×1080p@23.98/24/25/29.97/30/50/59.94/60Hz
  - 1920×1080i@50/59.94/60Hz



**4K HDMI2.0/OPT Output Card**  
**2x HDMI 2.0**  
**4x 10G OPT**

- HDMI 2.0: HDCP 2.2 and HDCP 1.4 compliant
  - Up to 4096×2160@60Hz 4:4:4 8-bit
  - DL and 4K output supported
- DL:
  - Max. output width: 4096 pixels
  - Max. output height: 4096 pixels
- 4K:
  - Max. output width: 8192 pixels
  - Max. output height: 7680 pixels
  - HDMI 2 copies the output on HDMI 1
- OPT 1 and OPT 2 copy the output on HDMI 1.
- OPT 3 and OPT 4 copy the output on OPT 1 & OPT 2.
- Support for VESA/CVT and user timings
- Common resolutions
  - 1920×1080p@30/48/50/59.94/60Hz
  - 2048×1080p@30/48/50/59.94/60Hz
  - 3840×1080p@30/50/59.94/60Hz
  - 3840×2160p@30/50/59.94/60Hz



**HDMI1.4 Quad Output Card**  
**4x HDMI 1.4**


- HDCP 1.4 compliant
- Support for single link (default) and dual link output
- SL:
  - Up to 2048×1080@60Hz 4:4:4 8-bit
  - Max. output width: 4096 pixels
  - Max. output height: 2048 pixels
  - Connectors 1, 2, 3 and 4 are all active
- DL:
  - Up to 3840×1080@60Hz 4:4:4 8-bit
  - Max. output width: 4096 pixels
  - Max. output height: 4096 pixels
  - Connectors 2 and 4 are active, connectors 1 and 3 copy the output on connectors 2 and 4
- Support for VESA/CVT and user timings
- Common resolutions
  - 1920×1080p@30/48/50/59.94/60Hz
  - 2048×1080p@30/48/50/59.94/60Hz
  - 3840×1080p@30/50/59.94/60Hz



**HDMI1.3 Quad Output Card**  
**4x HDMI 1.3**

- HDCP 1.4 compliant
  - Up to 2048×1080@60Hz 4:4:4 8-bit
  - Max. output width: 2048 pixels
  - Max. output height: 2048 pixels
- Connectors 2 and 4 are active, while connectors 1 and 3 copy the outputs on connectors 2 and 4 respectively
- Support for VESA/CVT and user timings
- Common resolutions
  - 1920×1080p@30/48/50/59.94/60Hz

## AUX



**AUX HDMI Output Card**  
**4x HDMI 1.3**

- HDCP 1.4 compliant
  - Up to 2048×1080@60Hz 4:4:4 8-bit
  - Max. output width: 2048 pixels
  - Max. output height: 2048 pixels
- Support for VESA/CVT and user timings
- Common resolutions
  - 1920×1080p@30/48/50/59.94/60Hz

### More Cards

We offer more DVI cards for your choice, including SL-DVI Quad Input Card, DVI (HDMI1.4) Quad Output Card, DVI (HDMI1.4)/OPT Output Card, SL-DVI Quad Output Card and AUX SL-DVI Output Card. If you need more details about these cards, please contact us.

### Caution

All the cards can be only installed into the designed slots. Installing a card into an incorrect slot will cause device failure.

Specifications subject to change without prior notice.