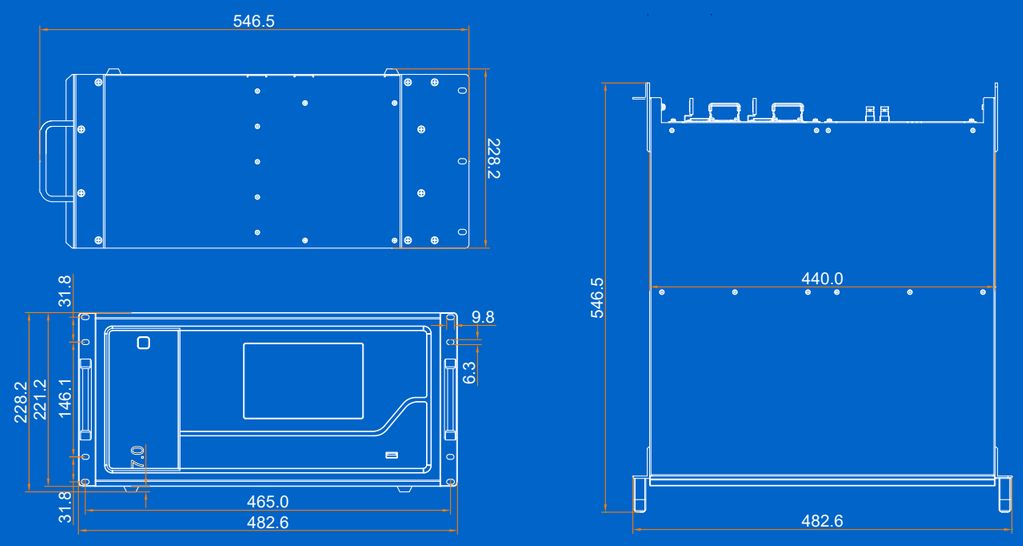
Dimensions



Unit: mm

Physical Specifications

Dimensions (without handles, rack ears & rack mount)

L 482.6 mm×P 513 mm ×H 212.2
W 19 inch×D 20.2 inch×H 8.4 inch
Please refer to the dimension diagram for more details.

Dimensions (with handles, rack ears & rack mount)

L 482.6 mm×P 546.5 mm ×H 228
W 19 inch×D 21.5 inch×H 9.0 inch
Please refer to the dimension diagram for more details.

Product Weight

30.3 kg / 66.8 lbs (Fully loaded without accessories)
50.3 kg / 110.9 lbs (Fully loaded with accessories & flight case)

Electrical Parameters

Dual redundant power supply
Power connector: AC100V–240V 50/60Hz
Max power consumption: 600 W

Noise on Average (@1, 0.75m height)

Front: 47 dB
Rear: 51.3 dB

Operating Conditions

Temperature: 0°C to 45°C
Humidity: 0% RH to 80% RH, non-condensing

Safety Compliance

CE FC IC

Packing Information

- 2×Power cables
- 1×Flight case (Optional)
- 1×RJ45-RJ45 Ethernet cable
- 1×USB 1.5m
- 1×U Disk
- 1×Lion screwdriver
- 1×Quick Start Guide
- 1×Customer Letter
- 1×Safety Manual
- 1×Certificate of Approval

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PIXELHUE

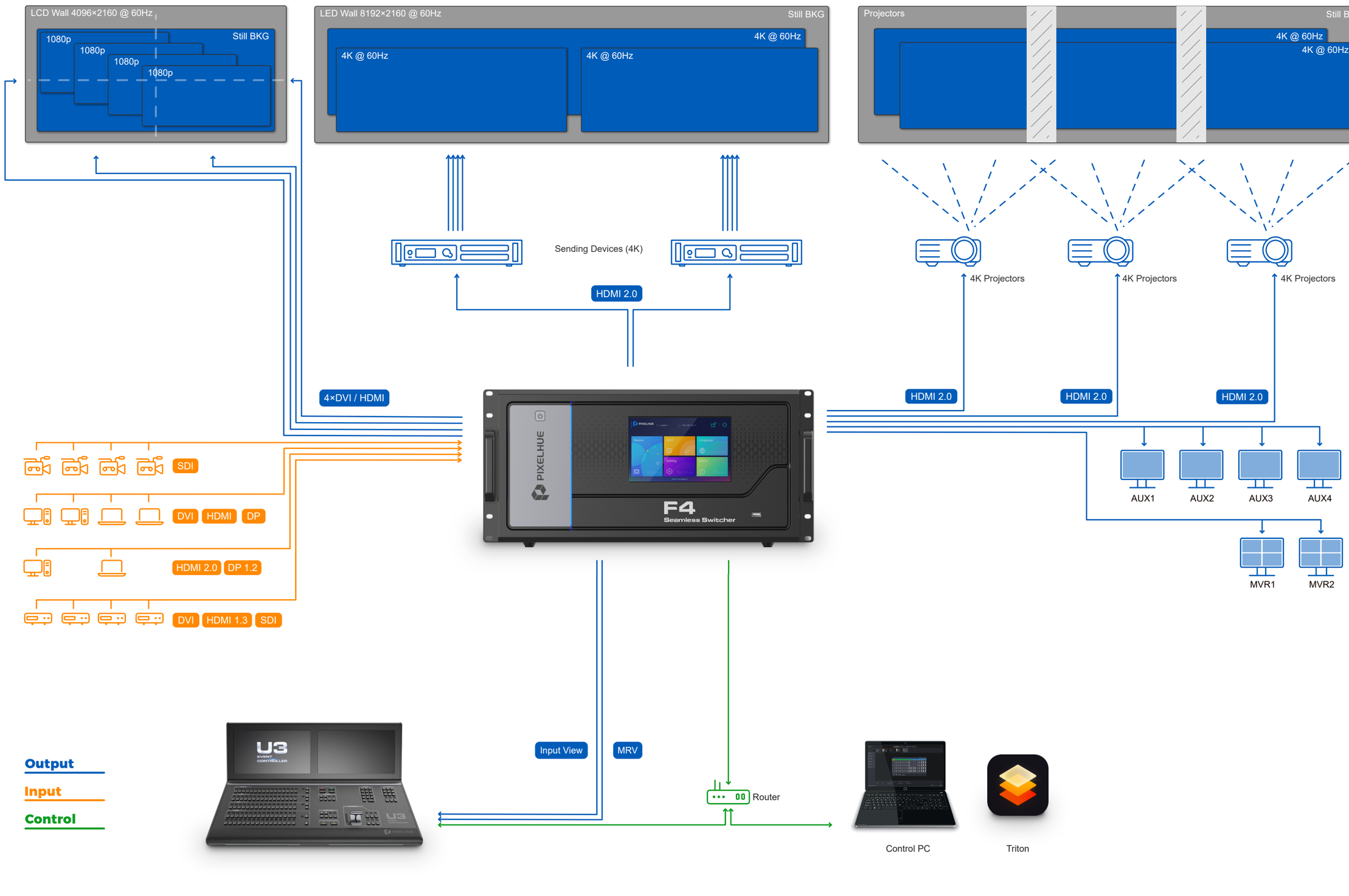
F4

Flagship Multi-Screen Presentation Switcher

MODULAR · HDMI · HDCP · SCALABLE · 4K@60HZ · EDGE BLEND
LED COMPATIBLE · 60HZ 4:4:4 10bits · UP TO 32 INPUTS · UP TO 24 OUTPUTS · OPTICAL FIBER · DP 1.2

Powerful Seamless Switcher 48 megapixel, true 4K@60Hz

What F4 Can Do for You



PIXELHUE

FEATURES

The Highest Performance

Pixelhue Flexi View series- F4, 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.

F4, designed with the latest high-Performance FPGA Chipset, delivers reliable, stable, faster, and better image performance, and outputs non compressed 4k@60hz 4:4:4 10bits video. 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 F4 features support for projectors and irregularly shaped displays, two features not available on the F4 Lite.

Ultimate flexibility through modular design

The F4 Processor is designed with 8 input slots and 6 output slots, allowing you to easily select I/O modules with different input and output connectors to match the visual system's requirement. More optional I / O modules will be provided for upgrades in the future. The F4 utilizes a modular design and supports 8 input and 6 output cards with a maximum of 32 inputs and 24 outputs. Each output card can offer up to 2K@60Hz loading capacity. The F4 supports at most 48 SL mix layers, or 24 DL mix layers or 12 4K mix layers. It also supports a variety of input and output connectors, including DVI, DP, HDMI, and 3G SDI connectors, allowing easy customization for any project or show.

Key Features

- Based on Apoll o pure FPGA architecture
- Modular design, field-swappable I/O cards, power supplies and main control card
- Removable and swappable dual power supplies
- Up to 32×2K60p inputs and 24×2K60p outputs
- True 4K60p 4:4:4 10 bit video processing
- Removable and swappable I/O cards
- Field-installable IO cards to provide a variety of connectivity possibilities
- Up to 64×SL mixing layers, 32×DL mixing layers or 16×4K 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
- 2×Multiviewer outputs with flexible layouts, adjustable borders and UMD
- Luma key and chroma key
- Input sync with Genlock; Genlock accepts bi-level or tri-level signals
- Live input view on 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, flipping and border

Reliable & worry-free operation

In this rapidly evolving market, reliable technology is the key to an outstanding event. The F4 allows you to configure the system to accommodate a variety of connectivity arrangements and display requirements. The F4 features dual power supplies, full machine data backup to local configuration, fast restore and can work perfectly 24/7. F4 also undergoes a series of rigorous drop tests, shock & vibration tests and thermal tests, ensuring it can survive in any kind of road trip or event environments.

Easy to Use

F4 works exceptionally well with our matching video processing software, TRITON. TRITON provides an offline mode and pre-editing functionality, which can directly import while on-site and migrate between different devices. This software is easy to master, and a sophisticated yet user-friendly interface guides you from beginning to end of any kind of event with as little complex operation as possible.

The F4 also improves on the F4 Lite with a larger 7" LCD display on the front panel for better MVR monitoring.

Total event control with U3 Controller

With the U3 event controller, 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 exhibition.

Technical Specifications

Inputs

1. Up to 8 input cards
   a. 4K connector supports up to 4K2K@60 4:4:4 8-bit inputs
   b. DL connector supports up to 4K1K@60 4:4:4 10-bit inputs
   c. SL connector supports up to 2K1K@60 4:4:4 10-bit inputs
   d. 4K connectors (DP 1.2 and HDMI 2.0), each supporting up to 4K2K@60Hz 4:4:4 8-bit
   e. DL connectors (DP 1.1 and dual-link DVI), each supporting up to 4K1K@60Hz 4:4:4 10-bit
   f. SL connectors (HDMI 1.3, single-link DVI and 3G-SDI), each supporting up to 2K1K@60Hz 4:4:4 10-bit
2. Standard, custom and advanced EDID settings
   Common resolutions: 1920×1080p@60Hz, 3840×1080p@60Hz and 3840×2160p@60Hz, etc.
3. Input source deinterlacing processing
4. Input source cropping

Outputs

1. Up to 6 outputs
   a. 4K connector supports up to 4K2K@60 4:4:4 8-bit outputs
   b. DL connector supports up to 4K1K@60 4:4:4 10-bit outputs
   c. SL connector supports up to 2K1K@60 4:4:4 10-bit outputs
   d. 4K connectors (HDMI 2.0), each supporting up to 4K2K@60Hz 4:4:4 8-bit
   e. DL connectors (HDMI 1.4 and dual-link DVII), each supporting up to 4K1K@60Hz 4:4:4 10-bit
   f. SL connectors (HDMI 1.3, single-link DVI and 3G-SDI), each supporting up to 2K1K@60Hz 4:4:4 10-bit
   g. 10G OPT copy output
2. Standard, custom and advanced output timing settings
3. Output width can be up to 8192 pixels, better choice for LED applications

Multiviewer Outputs

1. 2 dedicated single-link DVI or HDMI 1.3 outputs configurable as MVR connectors with a fixed resolution of 1920×1080p@60Hz
2. Monitor all inputs and screens (PVW and PGM)
3. UMD display and color adjustment
4. MVR background color adjustment
5. Customizable layouts for easy use
6. Border adjustment for MVR window

AUX

1. Supports AUX screen. AUX connector can be in independent or mosaic use
2. AUX screen can follow the preset switching
3. Free view of inputs and screens (PGM)

Screens

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

Transition and Effect

1. Send PVW to PGM via Take, Cut or T-bar operation.
2. Fade transition
3. Customizable transition durations
4. Copy or swap display on PVW and PGM

Layers

1. Each output card supports up to 8× SL mixing layers, 4×DL mixing layers or 2×4K mixing layers.
2. Full screen roaming supported
3. Fade and cut transitions on all layers
4. Adjustable layer flipping, mask and border
5. Pure color layer can be used as background

BKG & LOGO

1. BKG can be a captured or imported image.
2. Unlimited BKG quantity in 512 MB storage space
3. Supports imported LOGO images.
4. Independent BKG and LOGO for each screen
5. BKG fills the whole screen by default.

Processing

1. High quality scaling engine
2. Low latency processing
3. Compliant with HDCP 1.4 and HDCP 2.2

Control

1. Intuitive control via U3 event controller
2. Dual control modes, U3 event controller and control PC

MODULAR

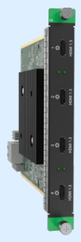
Inputs

8×slots for input cards
Each supports up to 4K@60Hz or 4×1080p60Hz

SL-DVI Quad Input Card

Single link DVI-D×4

- HDCP 1.4 compliant
  - SL mode: Up to 2048×1080@60Hz 4:4:4 8-bit
  - DL mode: Up to 4096×1080@60Hz 4:4:4 8-bit
- Dual link mode supported, connectors 2 and 4 active
- EDID management for VESA, and CVT compliant user timings
- Common resolutions
  - 1920×1080p@30/48/50/59.94/60Hz



HDMI1.3 Quad Input Card

HDMI1.3×4

- HDCP 1.4 compliant
  - Up to 2048×1080@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

3G-SDI Quad Input Card

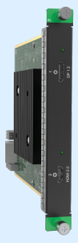
3G SDI×4

- Downward compatible with SD/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 (NTSC)@59.94Hz
  - 1920×1080i@50/59.94/60Hz

DP1.1 Quad Input Card

DP1.1×4

- HDCP 1.3 compliant
  - SL mode: Up to 2048×1080@60Hz 4:4:4 8-bit
  - DL mode: 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



4K HDMI2.0/DP1.2 Input Card

DP 1.2×1
HDMI 2.0×1

- DP 1.2: HDCP 1.3 compliant
  - Up to 4096×2160@60Hz 4:4:4 10-bit
- HDMI 2.0: HDCP 2.2 compliant
  - Up to 4096×2160@60Hz 4:4:4 8-bit
- DP or HDMI can be used each time.
- 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

NEW RELEASED.

Dual 4K HDMI2.0/DP1.2 Input Card

DP 1.2×2
HDMI 2.0×2

- DP1.2: HDCP 1.3 compliant
  - Up to 4096×2160@60Hz 4:4:4 10-bit
- HDMI: HDCP 2.2 compliant
  - Up to 4096×2160@60Hz 4:4:4 8-bit
- Only one of the HDMI2.0 or DP1.2 can run simultaneously with that in the other parallel group.
  (Group 1: Connectors 1&2.
  Group 2: Connectors 3&4)
- 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

NEW RELEASED.

AUX

AUX SL-DVI Output Card

DVI1.3×4

- 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

AUX HDMII Output Card

HDMI1.3×4

- 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

Outputs

6×slots for output cards
Each supports up to 4K@60Hz or 4×1080p60Hz

SL-DVI Quad Output Card

Single link DVI-D×4

- 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

HDMI1.3 Quad Output Card

HDMI 1.3×4

- 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

DVI(HDMI1.4) Quad Output Card

DVI(HDMI 1.4)×4

- HDCP 1.4 compliant
- SL mode:
  - Up to 2048×1080@60Hz 4:4:4 8-bit
  - Max. output width: 2048 pixels
  - Max. output height: 2048 pixels
  - Connectors 1, 2, 3 and 4 are all active.
- DL mode:
  - Up to 4096×1080@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
- Support for single link (default) and dual link modes
- Compatible with HDMI 1.4 in DL mode
- 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

HDMI1.4 Quad Output Card

HDMI 1.4×4

- HDCP 1.4 compliant
- SL mode:
  - Up to 2048×1080@60Hz 4:4:4 8-bit
  - Max. output width: 2048 pixels
  - Max. output height: 2048 pixels
  - Connectors 1, 2, 3 and 4 are all active
- DL mode:
  - Up to 4096×1080@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
- Support for single link (default) and dual link modes
- 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

4K HDMI2.0/OPT Output Card

HDMI 2.0×2
10G OPT×4

- HDMI 2.0: HDCP 2.2 compliant
  - Up to 4096×2160@60Hz 4:4:4 8-bit
- DL mode:
  - Max. output width: 4096 pixels
  - Max. output height: 4096 pixels
- 4K mode:
  - Max. output width: 8192 pixels
  - Max. output height: 7680 pixels
  - HDMI1: output interface, HDMI2: copy for HDMI1A
- OPT 1 and OPT 2 copy the output on HDMI.
- OPT 3 and OPT 4 copy the output on OPT1 & 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

NEW RELEASED.

DVI(HDMI1.4)/OPT Output Card

DVI(HDMI 1.4)×2
10G OPT×4

- DVI: HDCP 1.4 compliant
  - Up to 4096×1080@60Hz 4:4:4 8-bit
  - Max. output width: 4096 pixels
  - Max. output height: 4096 pixels
- OPT 1 copies the output on DVI-1
- OPT 2 copies the output on DVI-2
- OPT 3 copies the output on OPT 1
- OPT 4 copies the output on 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

Caution

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

Specifications subject to change without prior notice.