Konvision

KUM-1810D-IP25G

18.4 INCH 4K HDR ST2110 IP25G MONITOR

4K UHD | 1000 nits | 1000:1 Contrast | ≥98% DCI-P3 | HDR HLG&PQ | ST 2110 | SFP 28 | 12G SDI | 4K Signal | 178° H/V Viewing Angle

INTRODUCTION

The KUM-1810D-IP25G features redundant 2×25GbE SMPTE-2110 IP interfaces for direct integration into IP-based broadcast systems. Equipped with 2×12G-SDI and 2×3G-SDI inputs & loop-outs for connecting professional equipment, it converts ST2110 IP streams to 12G-SDI output. The 18.4" 3840×2160 4K IPS panel delivers ≥98% DCI-P3 color gamut, 1,000nits brightness, and HDR HLG & PQ support, making it ideal for high-quality video content production and transmission.

SPECIFICATION

Panel	
Model No.	KUM-1810D-IP25G
Backlight	LED
Size	18.4"
Resolution	3840×2160
Aspect Ratio	16:9
Viewing Angle	178°(H) / 178°(V)
Brightness	1000cd/m²
Contrast Ratio	1,000:1
Color Depth	10bit (8bit+FRC) 1.07B
Input	
2× SFP28	ST2110 IP stream input interfaces (×2)
4×BNC	12G/6G/3G/HD/SD-SDI（SDI1/SDI2） 3G/HD/SD-SDI (SDI3/SD14)
1× BNC	Genlock input, Black Burst or Tri-level sync (×1)
1×HDMI	HDMI 2.0
Output	
4×BNC	12G/6G/3G/HD/SD-SDI（SDI1/SDI2; SDI1 supports ST2110 IP to 12G-SDI conversion output） 3G/HD/SD-SDI (SDI3/SD14)
1×HDMI	HDMI 2.0
Remote Interface	
1×RJ45	10/100M Ethernet Input Interface
1×RJ45	10/1000M Ethernet Input Interface for IP network management (NMOS)
1×RJ45	GPI Input Interface
2×RJ45	RS422 Input and Loop Out Interface
Audio In & Out	
Audio In	16-ch embedded audio via SDI, 8-ch via HDMI
Audio Out	3.5mm Headphone Jack, 2×3.0W Speakers
Audio Meter Display	Vertical/ transparent/opaque display
General	
Input Voltage	DC 12-16.8V / AC 100-240V 50/60Hz
Power	≤107W
Installation	VESA MIS-D (100×100mm)
Net Weight	≈8.3kg
Accessory	Power Cord

*Specifications may be changed without prior notice.

HIGHLIGHTS

Advanced Display & Color Management
- Color spaces: Rec.709/EBU/DCI-P3/DCI-P3 D65/Rec.2020/Bypass
- Data level: Auto/Limited (64–940) / Extended (64–1019)/Full (0–1023)/ SMPTE Full(4–1019)
- EOTF options: Bypass/2.0/2.2/2.4/2.6/2.4(HDR)
- HDR standards: ST2084PQ/ST2084 PQ(softroll), HLG(1.03/1.11/ 1.16/1.20/1.27/1.33)
- VPID(Video Payload ID)recognition for color space/EOTF auto matching
- Multiple camera color space and OETF convert to standard color space and EOTF display
- Auto-adaptive 4K/HD signal display
- Dynamic contrast with adaptive backlight control for enhanced brightness gradation

ST2110IP25G
- Uncompressed 25G ST2110 IP stream ultra-low latency transmission
- 2 × SFP28 fiber interfaces for ST2110 IP stream input
- 1 × ST2110 IP decoding to 12G-SDI output
- Supports SMPTE ST2110-10/20/30/40 protocols and SFP28 25G
- SMPTE ST2022-7 redundancy recovery; supports IGMP V2.0/V3.0
- Supports NMOS IS-04 and IS-05 protocols
- Built-in 4K UHD frame synchronizer with horizontal/vertical phase adjustment
- Supports BB/Tri-level external Genlock reference
- Compatible with SMPTE ST2059 PTP grandmaster clock and internal ST2110 encapsulation sync
- Supports multiple IP configuration presets, with web-based backend for saving presets
- Web-based remote control GUI with customizable configuration save, recall, and reset

Input & Output
- Supports 4:4:4 12-bit video signal processing
- 2×12G-SDI inputs & loop-outs (4K single/quad-link)
- 2×3G-SDI inputs & loop-outs
- Quad-link (SQD/2SI) supports 4096×2160 60p
- 12G-SDI single-link 4K SDI supports 4096×2160 60p
- 1×HDMI 2.0 input & loop-out, supports SDI/SFP28 conversion output
- Supports 4K UHD to 2K HD down-conversion via SDI 2 output
- Supports HDR to SDR down-conversion output via SDI

3D LUT
- 3D LUT calibration compatible with ColourSpace/Calman
- Supports multiple custom 3D LUTs loading and output via SDI

Multi-View Monitoring
- Supports various display modes: 4K / Quad-View / HD Single-View
- Quad-view mode for simultaneous display of SDI/HDMI/SFP28 signals
- Independent color space and EOTF settings per window in quad-view mode
- Instant single-view switch from any window in quad-view mode

Monitoring Tools
- HDR area display, HDR/SDR ratio graph and pixel measurement
- Adjustable opacity and waveform position
- Supports horizontal mirror and freeze frame
- HDR Waveform, Vector, Histogram, CIE Chromaticity Diagram, CIE Color Volume, RGB 3D Cube Graph
- False Color, Zebra, Focus Assist, Darkness & Highlight Check
- Aspect ratio, Center Marker, Safe Area, Markers with BOX control

Audio Processing & Broadcast Ancillary Features
- Audio Level Meter, Audio Phase, 5.1/7.1 Surround Phase
- 16-ch embedded audio via SDI, 8-ch via HDMI
- Fast audio source switching in quad-view mode
- Supports 4.1-channel audio
- VITC1/2, LTC timecode; static/dynamic UMD/IMD
- Supports 608/708 Closed Captioning (CC)
- GPI remote control for Tally/assist functions/scene preset

Mechanical Design & Operation
- Multiple scene presets; user-defined presets import/export via USB
- Key lock function; 3 LED indicator modes (Off / Preset Scene Active / Dual-Color)
- Aluminum alloy chassis, built-in speakers, headphone jack, volume control, and mute settings
- USB/Ethernet for 3D LUT loading and firmware updates

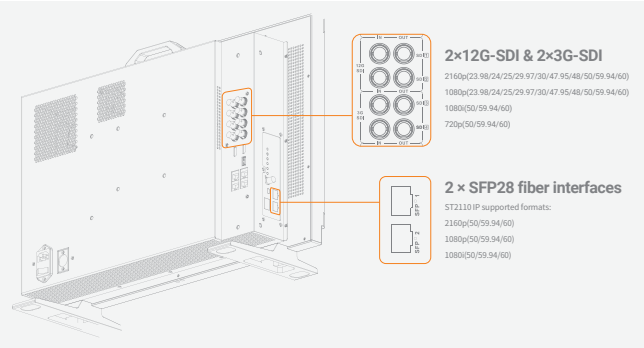
FEATURES

Wide-view, UHD IPS Panel - 4K Resolution

Featuring a 18.4-inch IPS panel with 3840×2160 4K UHD resolution (4× FHD), KUM-1810D-IP25G offers 178°H/V viewing angle, 10bit (8bit+-FRC) color depth and rapid response, delivering exceptional image clarity and fine detail.

SFP28/SDI/HDMI Interfaces for 4K Monitoring and IP Decoding Output

2× SFP28 fiber interfaces for SMPTE ST2110 IP stream input, with ST2110 IP to 12G-SDI conversion output; also equipped with 2×12G-SDI, 2×3G-SDI, and 1×HDMI inputs & loop-outs; 4× 3G-SDI quad-link input supports SQD and 2SI formats.



SMPTE-2110 IP Network Lossless Transmission, Plug-and-Play

Supports SMPTE-2110 standards (ST2110-10/20/30/40) for IP-based 4K UHD SDI conversion and processing. Synchronizes with PTP grandmaster clock; uncompressed audio/video transmission ensures data integrity and synchronization.

Supports NMOS Interoperability for Efficient Collaborative Operation

Supports NMOS IS-04 discovery and registration, and NMOS IS-05 device connection and remote control, enabling signal source reception and assignment within IP network matrices for efficient collaboration. Supports SMPTE ST2022-7 for seamless protection switching, ensuring reliable broadcast.

Multiple HDR/Color Spaces Available

Supports high dynamic range (HDR) monitoring, providing standard HDR EOTF (Electro-Optical Transfer Function) with built-in various standard color spaces and EOTFs. It also supports VPID reading display and Payload ID recognition, automatically matching color space and EOTF.

- Color Spaces: Rec.709/EBU/DCI-P3/DCI-P3 D65/Rec.2020/Bypass
- HDR EOTF: HLG (1.03/1.11/1.16/1.20/1.27/1.33), ST2084 PQ/ST2084 PQ(softroll)
- EOTF: Bypass/2.0/2.2/2.4/2.6/2.4(HDR)

Camera Gammas to Standard Gamuts Conversion

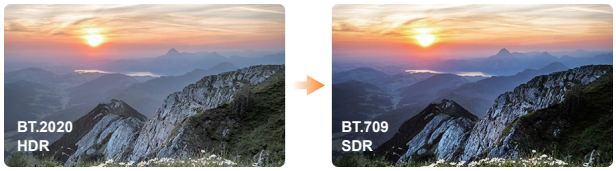
Built-in various mainstream camera gamma curves enable the conversion of camera color space and OETF to standard color space and EOTF display.

Camera Log:

- Arri Wide Gamut 3/LogC3
- Arri Wide Gamut 4/LogC4
- Canon Cinema Gamut/Canon Log2/3
- DJI D-Gamut/D-Log
- Panasonic V-Gamut/V-Log
- Sony S-Gamut/S-Log2
- Sony S-Gamut3/S-Gamut3.Cine/S-Log3

4K HDR-HD SDR Down-Conversion

Single-link SDI can realize 4K-HD down-conversion and HDR-SDR conversion. Support NBCU LUTs, CMG LUTs production standards, to meet the 4K HDR and HD SDR high-quality production needs.



4K 3840×2160 Progressive

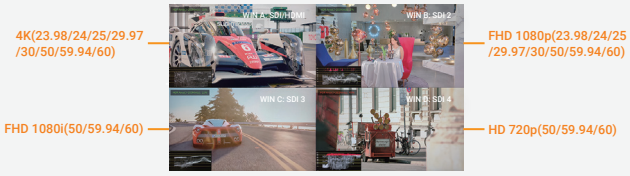
HD 1920×1080 Progressive/Interlaced

Customizable 3D LUT Import & Output

Users can load and save multiple custom 3D LUTs via USB port/network port. Custom LUTs can also be processed with the video output, effectively simplifying the color grading process for DIT and post-production work.

Quad-View: Mixed Inputs & Frame Rates

The Quad view mode supports the simultaneous input of four different signal sources, allowing for mixed resolutions and frame rates signals to be displayed together via SDI/HDMI/SFP+. Each split window can independently set Color Space and EOTF, as well as display HDR waveforms separately. This enables centralized monitoring of the entire system in a limited space, with the ability to quickly switch to a single view from any window.

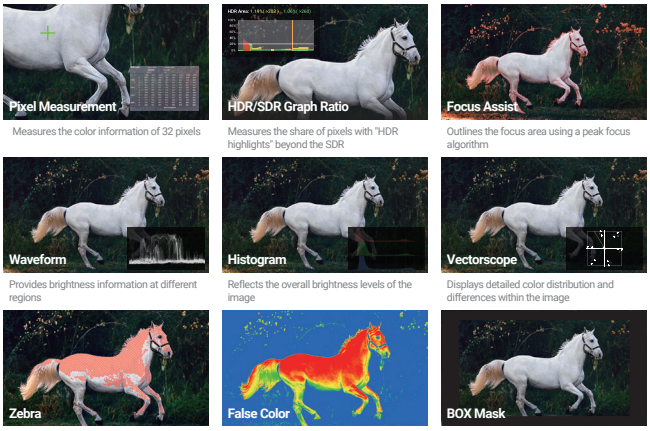


Mixed Inputs & Frame Rates

HDR Ratio Analysis – Compliant with HDR Production Standards

Automatically analyzes and displays the proportion of HDR Reference White (>203 nits) and HDR Mapping White (>260 nits) across the image. Exceeding recommended thresholds triggers an on-screen alert, ensuring full compliance with HDR video production specifications.

Professional Image Analysis Tools



Measures the color information of 32 pixels

Measures the share of pixels with "HDR highlights" beyond the SDR

Outlines the focus area using a peak focus algorithm

Provides brightness information at different regions

Reflects the overall brightness levels of the image

Displays detailed color distribution and differences within the image

Use zebra to mark areas where exposure exceeds the preset value

Applies brightness coloring to regions of the image based on various standards

Customizable mask size and position