plura®

SFP-25G Series

SFP28

Screen Sizes: 17" 24" 32" 43" 49" 55" 65" 86"

SFP-25G Series - Product Highlights:

SFP-25G from PLURA is the industry's first TRUE-IP 25GbE broadcast & media monitor solution, supporting uncompressed UHD based on SMPTE ST 2110, ST 2022-6^T & ST 2022-7. The flexibility and robustness of the SFP-25G platform is the ultimate solution for wide range of broadcast and professional media SDI to IP transition projects. The SFP-25G platform is a powerful hybrid solution supporting SFP+ / SFP28 10G / 25G (ST 2110, ST 2022-6 ^{T},ST 2022-7), 12G, 3G & 1.5G connectivity. The SFP-25G provides comprehensive interoperability capabilities with major and wide range of prominent third-party IP-UHD-FHD ready media solutions, providing our customers the ease of mind and adaptability to utilize Plura IP solutions with a variety of technology suppliers for a seamless end-to-end production workflow. The SFP-25G series features 2x 10/25 GbE SFP+/SFP28 complying with SMPTE ST 2022-7, seamless protection switching providing data loss and redundancy protection for critical distribution and monitoring applications "hitless switching". The SFP- 25G monitor series is available in multiple sizes starting from 17 all the way to 86.

Interoperability

EMBER+ NMOS JT-NM PTP HDR 4K ULTRA HD 12G-SDI IP 2110 2022-7 SFP28 (25G)

SFP-25G - Standards & Support

Ember+, NMOS, JT-NM Interoperability Support

Management Interface support (NMOS, In-band) and (Web UI / Ember+, via the Out-band control network port).

- NMOS IS-04 discovery and registration
- NMOS IS-05 device connection management
- JTNM NMOS certification support
- JSON snippet for NMOS control support
- Ember+ support with extensive Ember+ tree control
- Session Description Path "SDP" file support
- IGMP V2 & V3 support
- Plura web user interface "UI" support

ST 2110, ST 2022-6^T, ST 2022-7 & PTP/ST 2059 V2

- ST 2059-1/-2 provisions, Signal will be locked to PTP and aligned to ST 2059 provisions
- ST 2110-10, System architecture and synchronization: essences, RTP, SIP and PTP
- ST 2110-20, Uncompressed video transport, Wide / Narrow types
- ST 2110-21, Traffic shaping and network delivery timing
- ST 2110-30, Audio transport profile level C, 16CH, 48Khz sample rate, 11ms/.125µs
- ST 2110-40, Transport of ancillary data
- ST 2022-7 seamless protection switching providing data loss protection
- SMPTE ST 2022-6^T support with optional license

SFP-25G PROMINENT FEATURES

Plura SFP-25G series brings the exceptional built in feature set Plura monitors are known for, maintaining quality and performance to give broadcast & production facilities an edge in Ultra & Full HD monitoring.

Monitoring Advanced Features

- 10 bit panel color depth
- Supports up to 4096 x 2160 resolutions
- HDR (High Dynamic Range) capabilities
- PQ (SMPTE ST 2084) & HLG (Hybrid Log Gamma)
- RGB 12 Bit Digital Signal Processing
- Gamma Selectable (0.8 – 3.0)
- Color Temperature – User, VAR, Adjustable (11000K TO 3200K)
- (ICAC) - Plura Intelligent Connection for Alignment & Calibration 3D LUT (ITU-R BT 2020, Native, BT.709, SMPTE-C, EBU, NTSC, D-Cinema)
- ColourSpace PRO integration for advanced and accurate display profiling and calibration functionalities*
- Display Advanced Waveform & Vector Scope simultaneously with line select
- Programmable 3 User Front Pushbutton Controls & GPI
- Various and User defined Markers Display Safe Area in HD and SD
- False Color and Peaking Filter / Focus Assist Video Range with adjustable Y & C values.
- Display LTC & DVITC time code with line select
- Embedded Audio Input, Digital Audio Decoding

Closed Caption (708/608)

SFP-25G monitor supports & decodes closed caption streams with

- 708 Service 1, Service 2
- 608 Transcoded CC1,2,3&4
- 608 line 21
- 608 ANC

OP-47 Support

SFP-25G monitor can support Teletext 801 & Subtitle OP-47 for Australia & New Zealand regions.

Waveform / Vector

Display Advanced Waveform & Vector Scope simultaneously with line select

Gamma Adjustment

1.6   **2.2**

SFP-25G series provides different Gamma adjustment settings. The monitor is capable to select Gamma setting between (0.8 – 3.0)

Focus Assist

A focus-assist feature is important for focusing cameras.

Markers

Various and User defined Markers Display, Safe area in HD and SD.

False Color

False color function refers to a group of color rendering methods used to display images in color which were recorded in the visible or non-visible parts of the electro-magnetic spectrum. A false-color image is an image that illustrates an object in colors that differ from those a photograph (a true color image) would show.

Video Range

This function displays Luma (Y) & Chroma (C) out of range levels outside the user defined range.

Wide Color Gamut & Color Spaces support ▶

SFP-25G is built with intelligent connections for calibration alignment, adjustable colorimetry and gamma correction capabilities. The SFP-25G series can reproduce many color spaces (ITU-R BT 2020, Native, ITU-R BT.709, SMPTE-C, EBU, NTSC, D-Cinema). The Plura SFP-25G Series will feature the traditional software- redefine feature set built into most Plura monitors, including intelligent connections for calibration alignment, adjustable colorimetry, gamma correction and audio monitoring - all accessible from an intuitive menu offering smooth navigation. While using Plura's unique ICAC or ColourSpace Pro tool*, allows production staff to quickly and automatically calibrate multiple color-related elements across the entire monitor network over IP. This ensures that the SFP-25G Series is quickly re-calibrated to its reference standard, returning optimal brightness and color consistency for demanding 4K workflows.

*License is required

Wide Color Gamut & Color Spaces support

SFP-25G CONNECTIVITY

The powerful I/O configuration design of the SFP-25G comes with Dual 10/25 GbE SFP+/SFP28 interfaces as MEDIALAN1 and MEDIALAN2 complying with SMPTE ST 2110, ST 2022-6[T] & ST 2022-7 as well as the single SFP-SDI cage supporting multiple SDI I/O standards.
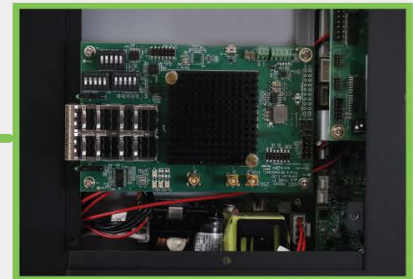
SFP+ 10 GbE / SFP28 25 GbE MODULE			
MEDIALAN1		**MEDIALAN2**	
IN 1	**OUT 1**	**IN 2**	**OUT 2**

SFP-25G series equipped with powerful and integrated dual 25G De-Encapsulation channels driven by SFP+(10GbE) / SFP28(25GbE) optical transceiver supporting (ST 2110, ST 2022-6[T], ST2022-7).
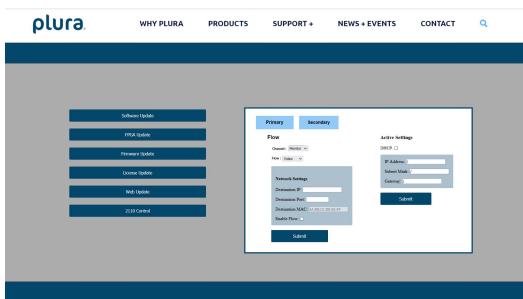

17 inch

Intuitive IP Modular Design

24 inch

Commanding and user-friendly control system

SFP-25G integrated with undemanding front panel controller as well user-friendly out-band web based user interface "UI" to configure the IP module in manual mode when and if NMOS in-band control is inaccessible or unapplicable.

Comprehensive hybrid I/O connectivity

32-86 inch

SFP-25G comes with powerful hybrid solution supporting 10/25 GbE SFP+/SFP28 (ST 2110, ST 2022-6[T] ST 2022-7), 12G, 3G & 1.5G connectivity.

- 2 x 12G/6G/3G/1.5G coaxial port
- 1 x SFP-SDI cage supporting multiple I/O standards
- 1 x HDMI 2.0 HDCP 2.2 port
- 1 x Quad 3G SQ and 2SI
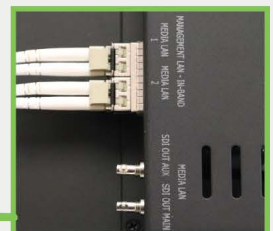
- 2 x 10/25 GbE SFP+/SFP28 interfaces as MEDIALAN1 and MEDIALAN2
- 1 x 12G/3G/1.5G loop output for MEDIALAN1 main ST 2110[T]
- 1 x 12G/3G/1.5G Aux/2nd channel ST 2110[T]

[T]optional

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SFP-25G Series production workflow

The SFP-25G provides comprehensive interoperability capabilities with wide range of third-party IP-UHD-FHD media platforms with a seamless end-to-end production workflow. It can decodes multiple SMPTE 2110 & 2022-7 media streams within any broadcast and professional media SDI & IP 2110 infrastructures.

Server

NMOS IN-Band media Control

MEDIALAN

25 GigE MAIN

25 GigE BACKUP

IP-Stream-A/12G

IP-Stream-B/12G

Plura PTP Generator
IEEE 1588-2008 PTPv2

MAIN Switch 25 GigE

BACKUP Switch 25 GigE

IP-Stream-A/12G

IP-Stream-B/12G

SFP-217-25G displaying
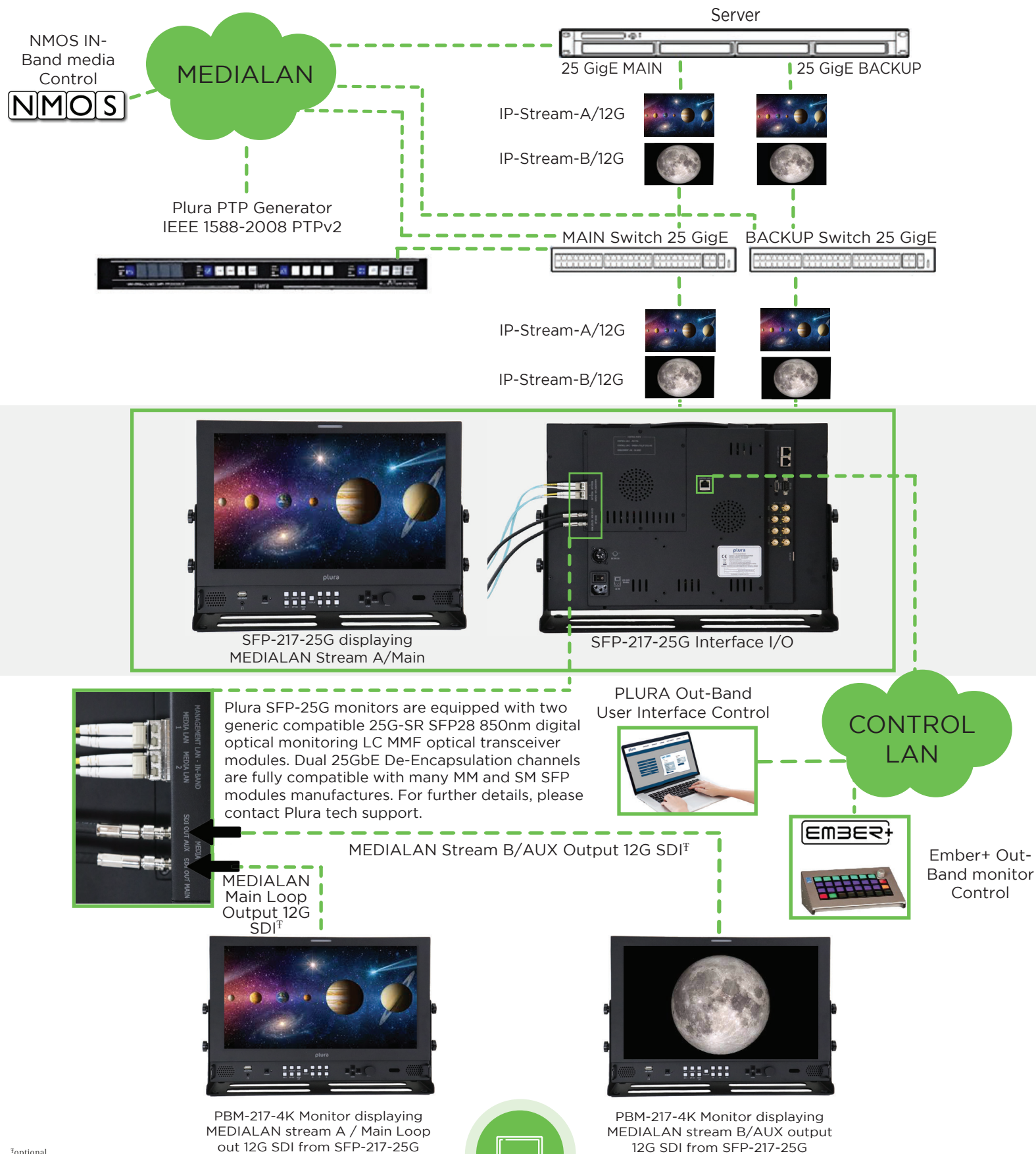MEDIALAN Stream A/Main

SFP-217-25G Interface I/O

Plura SFP-25G monitors are equipped with two generic compatible 25G-SR SFP28 850nm digital optical monitoring LC MMF optical transceiver modules. Dual 25GbE De-Encapsulation channels are fully compatible with many MM and SM SFP modules manufactures. For further details, please contact Plura tech support.

PLURA Out-Band
User Interface Control

CONTROL LAN

EMBER+

Ember+ Out-Band monitor Control

MEDIALAN Stream B/AUX Output 12G SDI†

MEDIALAN Main Loop Output 12G SDI†

PBM-217-4K Monitor displaying
MEDIALAN stream A / Main Loop
out 12G SDI from SFP-217-25G

PBM-217-4K Monitor displaying
MEDIALAN stream B/AUX output
12G SDI from SFP-217-25G

†optional

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	FUNCTION	SFP-217-25G	SFP-224-25G	SFP-324-25G	SFP-232-25G	SFP-243-25G
INPUT	SDI	4EA, Serial Digital, 12G/Quad 3G SQ/2SI/3G/HD-SDI BNC Jack				
	SFP SDI-25G	1EA, SFP Optical and/or Electrical SDI Port Serial Digital, 12Gb/s, 3Gb/s, 1.485Gb/s, 270Mb/s				
	SFP28 ETHERNET-25g	Dual 25G MEDIALAN 1 & MEDIALAN 2				
	HDMI	1EA, HDMI 2.0, 19pin Female				
OUTPUT	SDI	4EA, Serial Digital, 12G/Quad 3G SQ/2SI/3G/HD-SDI BNC Jack				
	SFP SDI-25G	1EA, SFP Optical and/or Electrical SDI Port Serial Digital, 12Gb/s, 3Gb/s, 1.485Gb/s, 270Mb/s				
	ST 2110 SDI OUT MAIN	1EA, Serial Digital, 12G/3G/HD-SDI BNC Jack				
	ST 2110 SDI OUT AUX	1EA, Serial Digital, 12G/3G/HD-SDI BNC Jack				
DIGITAL MEDIA FORMAT	SMPTE-ST-2110	SFP28 Ethernet - 25G / SFP SDI - 25G				
	SMPTE-ST 2082M	3840x2160 (23.98/24/25/29.97/30/50/59.94/60p)				
	SMPTE-428.1M	2048x1080P (24/25)				
	SMPTE-425(3G)	1080p(60/59.94/50/30/29.97/25/24/23.98/30sF/29.97sF25sF/24sF/23.98sF) 1080i (60/59.94/50)				
	SMPTE-260M	1920x1035i(60/59.94)				
	SMPTE-292M	1920x1080i (50/59.94/60) 1920x1080P (30Psf/25Psf/24Psf/30/25/24)				
	SMPTE-372M	Dual Link HD-SDI YPbPr(4:2:2): 1080P(50/59.94/60)/ Dual Link HD-SDI YPbPr/RGB(4:4:4)/ 1080P(30/29.97/25/24/23.98) 1080i(29.97/25/24/23.98)/ 720P(60/59.94/50)				
	SMPTE-296M	1280x720P (50/59.94/60)				
	SMPTE-259M/C	480i(59.94)/576i(50)				
	UHD HDMI 2.0	480P/720P/1080P/2160P				
AUDIO INPUT	SDI AUDIO INPUT	Embedded SDI Audio				
	HDMI AUDIO INPUT	Embedded Audio				
AUDIO OUTPUT	SPEAKER OUTPUT	2EA, 2W+2W				
	SDI AUDIO OUTPUT	Input Line & De-embedded Audio, 1- 16CH				
I/O CONTROL PORT	GPI	RJ-45 8 Pin (Programmable for General Purpose Input)				
	CONTROL LAN 1	RJ-45 8 pin Ethernet port, 100Mbps, supported for Plura PSC 500 wall control applications & TSL5.0 Tallyman				
	CONTROL LAN 2	RJ-45 8 pin Ethernet port, 1 GbE, supported for IP management, Ember+ & TSL 5.0 control applications				
	IP MANAGEMENT LAN	IN-BAND				
	USB	FPGA & Firmware Upgrade				
	RS232	D-sub 9 Pin Female/Firmware Upgrade				
	HTTP	HTTP Web Interface				
MEDIA DECODING LICENCE	ST-2110	X				
	ST-2022-7	X				
	ST-2022-6	OPTIONAL				
SYSTEM	PROCESSOR	FPGA				
	OPERATING	Linux				
LCD	SIZE	17"	24"	24"	32"	43"
	ASPECT RATIO	16 : 9	16 : 9	16 : 9	17 : 9	16 : 9
	RESOLUTION	3840 x 2160	3840 x 2160	3840 x 2160	4096 x 2160	3840 x 2160
	COLOR DEPTH	10 bit				
	VIEWING ANGLE DEGREE	Horizontal: 178 (Typ.) Vertical 178 (Typ.)				
	LUMINANCE OF WHITE	350 cd/m2	540 cd/m2	1000 cd/m2	350 cd/m2	350 cd/m2
	CONTRAST TYPICAL	1000: 1	1200 : 1	1200 : 1	1300 : 1	1000 : 1
	RESPONSE TIME	Tr=7ms / Tf=7ms	Tr=7ms / Tf=7ms	Tr=7ms / Tf=7ms	Tr=7ms / Tf=7ms	Tr=6ms / Tf=6ms

	SFP-217-25G	SFP-224-25G	SFP-324-25G	SFP-232-25G	SFP-243-25G
POWER REQUIREMENT	AC 100V - 240V (60/50 Hz)				
POWER CONSUMPTION	80 W	120 W	140 W	160 W	250 W
WORKING TEMPERATURE	0˚C ~ 40˚C (32˚~ 104˚F)				
WORKING HUMIDITY	10%RH ~ 85%RH (Non Condensed)				
STORAGE TEMPERATURE	-10˚C ~ 80˚C (14˚~176˚F)				
STORAGE HUMIDITY	10%RH ~ 85%RH (Non Condensed)				
WEIGHT (W/O STAND & PACKAGING	4.99 Kg - 11 lbs	9.9 Kg - 22.0 lbs	9.9 Kg - 22.0 lbs	15 Kg - 33 lbs	20.4 Kg - 45.0 lbs
WEIGHT (w/ PACKAGING)	8.8 Kg - 19.5 lbs	13.6 Kg - 30 lbs	13.6 Kg - 30 lbs	22.6 Kg - 50 lbs	32.6 Kg - 71.87 lbs
DIMENSION (WxHxD)	442 x 310 x 91 mm	572 x 412 x 91 mm	572 x 412 x 91 mm	737 x 416 x 85.6 mm	977 x 569 x 98 mm
(W/O STAND & PACKAGING	17.4 x 12.2 x 3.58 inch	22.51 x 16.22 x 3.58 inch	22.51 x 16.22 x 3.58 inch	29.0 x 16.37 x 3.37 inch	38.46 x 22.4 x 3.38 inch
PACKAGING DIMENSION (WxHxD)	584.2 x 482.6 x 254.0 mm	711.2 x 584.2 x 254.0 mm	711.2 x 584.2 x 254.0 mm	932 x 630 x 272 mm	1219 x 813 x 305 mm
	23 x 19 x 10 inch	28 x 23 x 10 inch	28 x 23 x 10 inch	36.69 x 24.8 x 10.71 inch	48 x 32 x 12 inch

ᵀoptional

Please note that the technical details shown here are provisional specifications (as of September 2021). The Information is subject to change without notice.

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	FUNCTION	SFP-249-25G	SFP-255-25G	SFP-265-25G	SFP-286-25G
INPUT	SDI	4EA, Serial Digital, 12G/Quad 3G SQ/2SI/3G/HD-SDI BNC Jack			
	SFP SDI-25G	1EA, SFP Optical and/or Electrical SDI Port Serial Digital, 12Gb/s, 3Gb/s, 1.485Gb/s, 270Mb/s			
	SFP28 ETHERNET-25g	Dual 25G MEDIALAN 1 & MEDIALAN 2			
	HDMI	1EA, HDMI 2.0, 19pin Female			
OUTPUT	SDI	4EA, Serial Digital, 12G/Quad 3G SQ/2SI/3G/HD-SDI BNC Jack			
	SFP SDI-25G	1EA, SFP Optical and/or Electrical SDI Port Serial Digital, 12Gb/s, 3Gb/s, 1.485Gb/s, 270Mb/s			
	ST 2110 SDI OUT MAIN	1EA, Serial Digital, 12G/3G/HD-SDI BNC Jack			
	ST 2110 SDI OUT AUX	1EA, Serial Digital, 12G/3G/HD-SDI BNC Jack			
DIGITAL MEDIA FORMAT	SMPTE-ST-2110	SFP28 Ethernet - 25G / SFP SDI - 25G			
	SMPTE-ST 2082M	3840x2160 (23.98/24/25/29.97/30/50/59.94/60p)			
	SMPTE-428.1M	2048x1080P (24/25)			
	SMPTE-425(3G)	1080p(60/59.94/50/30/29.97/25/24/23.98/30sF/29.97sF25sF/24sF/23.98sF) 1080i (60/59.94/50)			
	SMPTE-260M	1920x1035i(60/59.94)			
	SMPTE-292M	1920x1080i (50/59.94/60) 1920x1080P (30Psf/25Psf/24Psf/30/25/24)			
	SMPTE-372M	Dual Link HD-SDI YPbPr(4:2:2): 1080P(50/59.94/60) / Dual Link HD-SDI YPbPr/RGB(4:4:4) / 1080P(30/29.97/25/24/23.98) 1080i(29.97/25/24/23.98)/720P(60/59.94/50)			
	SMPTE-296M	1280x720P (50/59.94/60)			
	SMPTE-259M/C	480i(59.94) / 576i(50)			
	UHD HDMI 2.0	480P/720P/1080P/2160P			
AUDIO INPUT	SDI AUDIO INPUT	Embedded SDI Audio			
	HDMI AUDIO INPUT	Embedded Audio			
AUDIO OUTPUT	SPEAKER OUTPUT	2EA, 2W+2W			
	SDI AUDIO OUTPUT	Input Line & De-embedded Audio, 1- 16CH			
I/O CONTROL PORT	GPI	RJ-45 8 Pin (Programmable for General Purpose Input)			
	CONTROL LAN 1	RJ-45 8 pin Ethernet port, 100Mbps, supported for Plura PSC 500 wall control applications & TSL5.0 Tallyman			
	CONTROL LAN 2	RJ-45 8 pin Ethernet port, 1 GbE, supported for IP management, Ember+ & TSL 5.0 control applications			
	IP MANAGEMENT LAN	IN-BAND			
	USB	FPGA & Firmware Upgrade			
	RS232	D-sub 9 Pin Female/Firmware Upgrade			
	HTTP	HTTP Web Interface			
MEDIA DECODING LICENCE	ST-2110	X			
	ST-2022-7	X			
	ST-2022-6	OPTIONAL			
SYSTEM	PROCESSOR	FPGA			
	OPERATING	Linux			
LCD	SIZE	49"	55"	65"	86"
	ASPECT RATIO	16 : 9	16 : 9	16 : 9	16 : 9
	RESOLUTION	3840 x 2160	3840 x 2160	3840 x 2160	3840 x 2160
	COLOR DEPTH	10 bit			
	VIEWING ANGLE DEGREE	Horizontal: 178 (Typ.) Vertical 178 (Typ.)			
	LUMINANCE OF WHITE	350 cd/m2	1000 cd/m2	350 cd/m2	350 cd/m2
	CONTRAST TYPICAL	1000: 1	2500 : 1	1300 : 1	1000 : 1
	RESPONSE TIME	Tr=7ms / Tf=7ms	Tr=7ms / Tf=7ms	Tr=7ms / Tf=7ms	Tr=6ms / Tf=6ms

POWER REQUIREMENT	AC 100V - 240V (60/50 Hz)			
POWER CONSUMPTION	250 W	250 W	350 W	420 W
WORKING TEMPERATURE	0˚C - 40˚C (32˚~ 104˚F)			
WORKING HUMIDITY	10%RH - 85%RH (Non Condensed)			
STORAGE TEMPERATURE	-10˚C - 80˚C (14˚-176˚F)			
STORAGE HUMIDITY	10%RH ~ 85%RH (Non Condensed)			
WEIGHT (W?O STAND & PACKAGING	20.9 Kg - 46.07 lbs	30.5 Kg - 67.24 lbs	40.5 Kg - 89.28 lbs	95.5 Kg - 210.5 lbs
WEIGHT (w/ PACKAGING)	31.75 Kg - 70 lbs	38.1 Kg - 84 lbs	55.33 Kg - 122 lbs	115.5 Kg - 254.63 lbs
DIMENSION (WxHxD)	1109 x 664 x 92 mm	1245 x 721 x 86 mm	1464 x 844 x 87 mm	1954 x 1125 x 87 mm
(W/O STAND & PACKAGING	43.6 x 25.3 x 3.62 inch	49.01 x 28.38 x 3.38 inch	57.63 x 33.2 x 3.4 inch	76.9 x 44.29 x 3.4 inch
PACKAGING DIMENSION (WxHxD)	1219.2 x 863.6 x 304.8 mm	1473.2 x 990.6 x 304.8 mm	1625.6 x 1092.2 x 304.8 mm	2300 x 1450 x 305 mm
	48 x 34 x 12 inch	58 x 39 x 12 inch	64 x 43 x 12 inch	90.5 x 57 x 12 inch

†optional

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