#### MV-3240IP

Preliminary



### IP High Resolution Multi Viewer

# **MV-3240IP**



Multi-viewer that can accommodate up to 32 IP inputs. It supports SMPTE ST 2110-10/20/30/40 and SMPTE ST 2022-6/7. With the capability for 25GBASE-SR connections, it can output IP-HD32 input material to a 4K monitor. Ideal for a seamless transition to a MoIP system or a new constructions while maintaining the environment, functionality, and operability of existing baseband systems.

#### Supports IP input, output and ideal for to check IP materials

- Video inputs (Up to 32 Inputs):
  - IP Input: Supports up to 32 streams in HD or up to 8 streams in 4K IP (SMPTE ST 2110/ST 2022-6)\*1.
- IP: Compatible with SMPTE ST 2110-10/20/30/40, SMPTE ST 2022-6/7.
- Freely layout up to 25 windows for one 4K or up to 40 windows for four 2K signals.

#### **Features**

- Compatible with SFP28 modules and making the unit ready for either 10 or 25 GbE environments.
- Uses NMOS IS-05 for stream switching.
- Realizes minimum delay of one field (16.6ms) from IP to baseband output.
- Layout Manager.
  - Customizes layouts, using the software in Windows® to adjust image size, position, title display, and other settings.
  - Stores layouts on the viewer.
  - Recalls saved layouts directly from the front panel control.
- HD to 4K up-resizing and 4K to 2K down-resizing.
- Captures specified frames of streamed video.
- Cropping.
  - Specifies areas to crop in pixels or by percent.
  - Background image is shown outside cropped areas.
  - Aspect ratio also maintained after partial cropping (of one side, for example).
- Logo display in title areas.

- Video outputs (Up to 5 Outputs):
  - IP Output: Supports up to 4 streams in 3G/HD IP (SMPTE ST 2110/ST 2022-6).
  - SDI Output: Supports 4 outputs in 3G/HD-SDI or 1 output in 12G-SDI, or 1 output in 12G-SDI + 3 outputs in 3G-SDI, and HDMI 1 output\*<sup>2</sup>.
- Stores and displays 4 logo images.
- Tally, Title, and Timecode Display.
- Time of day, Timer, and Information Display.
- Can display time based on a 30-hour clock.
- Registers up to 24 schedule timers per day for 1 week.
- Supports external interfaces, and control protocols (including monitoring). SNMP function.
- Detects frozen frames. (Y/C and Y only).
- Views error logs or user text in the Information Display.
- Flashing borders or error icons/messages to identify screens with errors.
- Audio Level Display.
- Audio Monitoring Output.
- Cascading Function.
  - Cascade connection is possible between MV-3240IP and either the MV-3240 multi viewer or the IP-compatible multi-viewer MV-1640IP\*3.
  - Enables an increase in the number of windows per monitor.

#### **Options**

#### **Expansion cards**

MV-1640IF: Interface option Tally inputs, time correction, and alarm resets using up to 45 contact closure inputs to the GPI-IO connector on the rear of the unit.

MV-1640PS: Redundant power supply

#### Remote control units

HVS-AUX16A/16B/16C/16D/32A/64A<sup>-2</sup>: Auxiliary unit



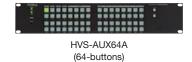












<sup>\*1</sup> MV-1640SDI is required, to be supported. \*2 Connectable max. 4 units.



## **MV-3240IP Datasheet (Preliminary)**

#### 1. Specifications

**Technical specifications** 

Video format		
IP signal	ST2110-20	2160p / 59.94, 50 1080p / 59.94, 50 1080i / 59.94, 50 720p / 59.94, 50
	ST2022-6	1080p / 59.94, 50 1080i / 59.94, 50 720p / 59.94, 50
Video input	Supports SDI 32 inputs (Asynchronous inputs are possible)	
IP	SFP A/B,C/D,E/F,G/H (SFP28): 25GBASE-SR Path redundant (ST2022-7)         ST2110-20:       2160p 8 streams or         1080p 32 streams or         1080i 32 streams or         720p 32 streams         ST2022-6:       1080p 28 streams or         1080i 32 streams or         720p 32 streams	
Audio input		
IP	48 kHz / 16-bit to 24-bit (Video synchronous) Max. 16 channels for each SDI input	
Video output		
HDMI	HDMI (Type-A): 1 output (4K in HDMI2.0 Level B mode) Frame rate: 59.94fps, 50fps 10-bit YCbCr 4:4:4, 8-bit YCbCr 4:2:0 or 8-bit RGB 4:4:4 Limited range	
12G/3G/HD-SDI	Up to 3840 x 2160 (12G-SDI or 3G/HD-SDI) BNC x 1 1080p, 1080i, 1035i or 720p (3G/HD-SDI) HD-BNC x 3 10-bit YCbCr 4: 2: 2	
IP	SFP A/B (SFP28): 25GBASE-SR Path redundant (ST2022-7) ST2110-20:	
Audio output		
Embedded (SDI)	Max 16 channels for each video (group x 4) 48kHz / 24-bit	
Embedded (HDMI)	Max 16 channels for each video (stereo pair x 4) 48kHz / 24-bit	
IP	ST-2022-6 or ST2110-30 (Video synchron Max 16 channels for each video 48kHz / 2	



Screen layout	User customized layout - Layouts for each output can be saved on the viewer up to 16 layouts.	
Title display	-Title length: Max. 16 characters x 4 lines for each input channel -Supported characters: Letters, numbers, symbols and Japanese kana/kanji (JIS 1 and 2)	
Tally display	Indicated as a frame (red/green/amber) or marker (red/green/amber) on each input window.	
Audio level display	Up to 16 audio channels of audio level metering per input	
Control Interface	LAN1: 100BASE-TX/1000BASE-T, RJ-45 x 1 LAN2: Same as above	
Layout Manager	Software for customizing window sizes and positions, switching windows, and registering backgrounds and logos (Windows® software)	
Live Viewer	Software for video streaming and pre-alarm recording to a PC. (Windows® software)	

**Options** 

MV-1640PS	Redundant power supply
MV-1640IF	Interface option

**Other Option** 

HVS-AUX16A/16B/16C/16D/32A/64A (*)	Auxiliary unit (Ethernet LAN Connection)
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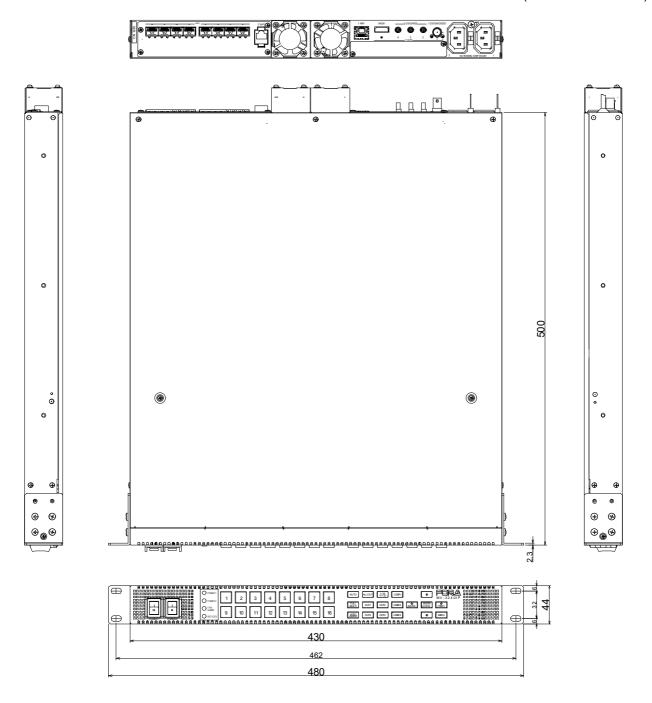
<sup>(\*)</sup> Connectable max. 4 units

**Accessories**AC Cord, EIA Rack Mount Brackets, Rubber Feet, HDMI Cable Lacing Bracket, and CD-ROM



#### 2. External Dimensions

(All dimensions in mm.)





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