

12G-SDI/IP Multi-Channel Video Server

MBP-1000VS series

Preliminary

FOR.A[®]

12G-SDI/IP MULTI-CHANNEL VIDEO SERVER
MBP-1000VS SERIES



Choose from a broad range of interfaces including 12G-SDI, 3G-SDI, and SFP+, for 12G-SDI or video over IP transmission. 4K XAVC™ and MPEG-2 codecs are available. Whether your video server will be used for ingest, playout, or other applications, the series has a model perfect for your needs.

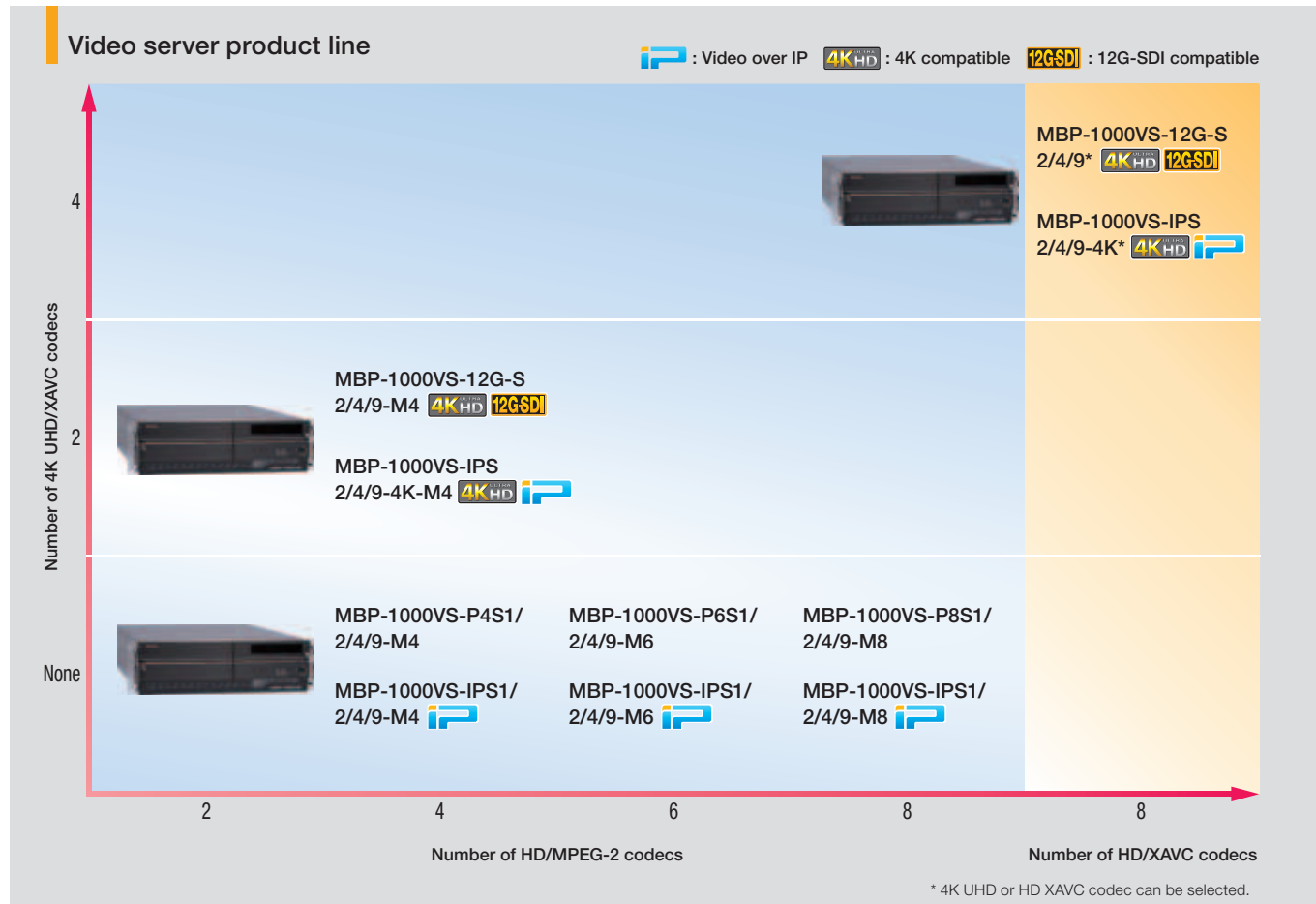
Enjoy the reliability of XAVC™ and MPEG-2 hardware codecs.*¹ Choose from 12G-SDI models, SFP+ equipped models (supporting 10 Gbps video over IP), or others. Add LTO for simultaneous backup*² during 4K recording or extended recording.*³



*1 Switches between recording and playback.
 *2 One channel only.
 *3 Up to 18.7 hours of continuous recording to LTO-7 (XAVC Class 300).

- 2160/59.94p*⁴ or 1080/59.94i
- 4K UHD: XAVC Intra Class 480*⁴, 300*⁴; HD: XAVC Intra Class 100 (all MXF formats)
- Choose from four SSD capacities: 1.2 TB,*⁵ 2.4 TB, 4.8 TB, or 9.6 TB
- Redundant power supply
- Full range of playout and ingest system applications. Bridges baseband output from cameras with file-based broadcast workflows.
- Can display time codes or credits on a monitor in sync with the main playout line
- LTO backup: Transfer MXF files created during recording to an optional internal LTO tape drive (one channel only)*⁴
- External LTO/SSD backup: Transfer recorded MXF files to an optional external LTO tape drive or SSD cartridge
- Control interfaces: Add an optional serial port or GPI port

*⁴ 4K models only
 *⁵ 1.2 TB available only for the MBP-1000VS-P series

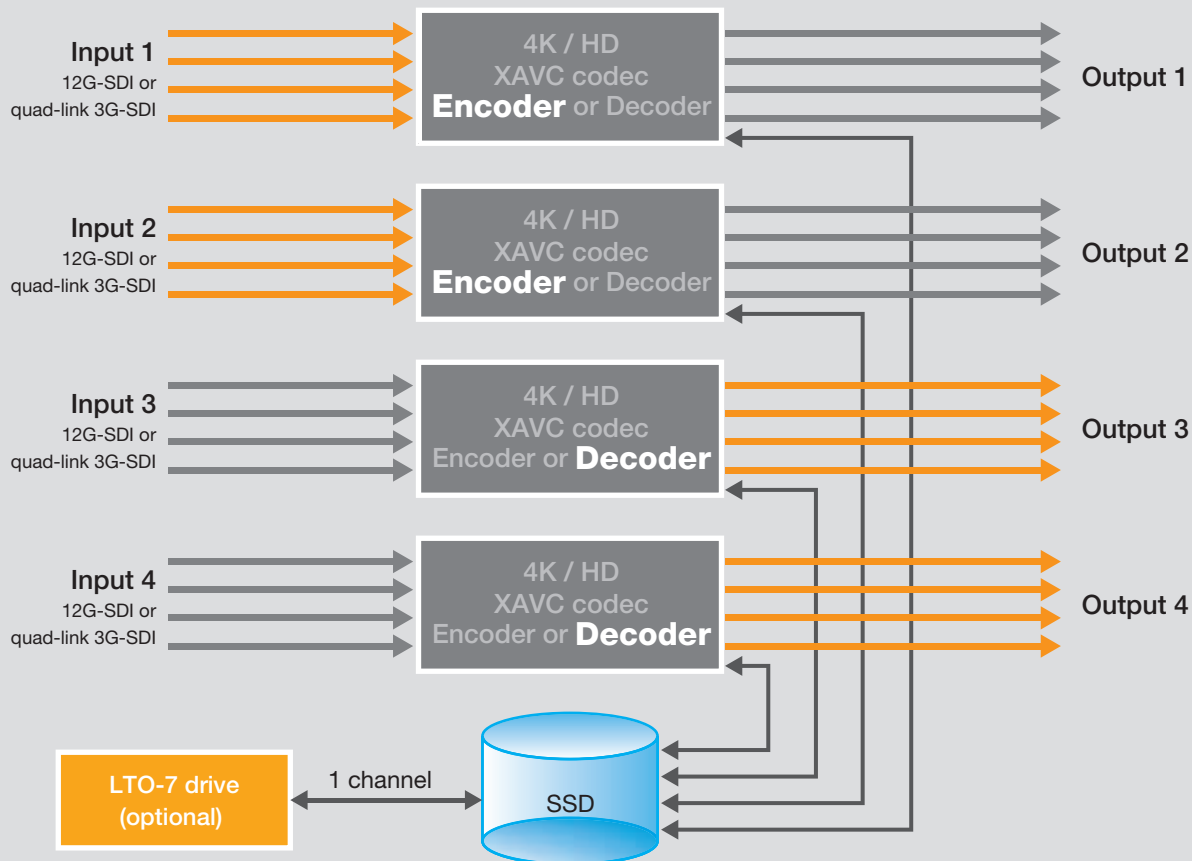


MBP-1000VS SERIES

MBP-1000VS-12G

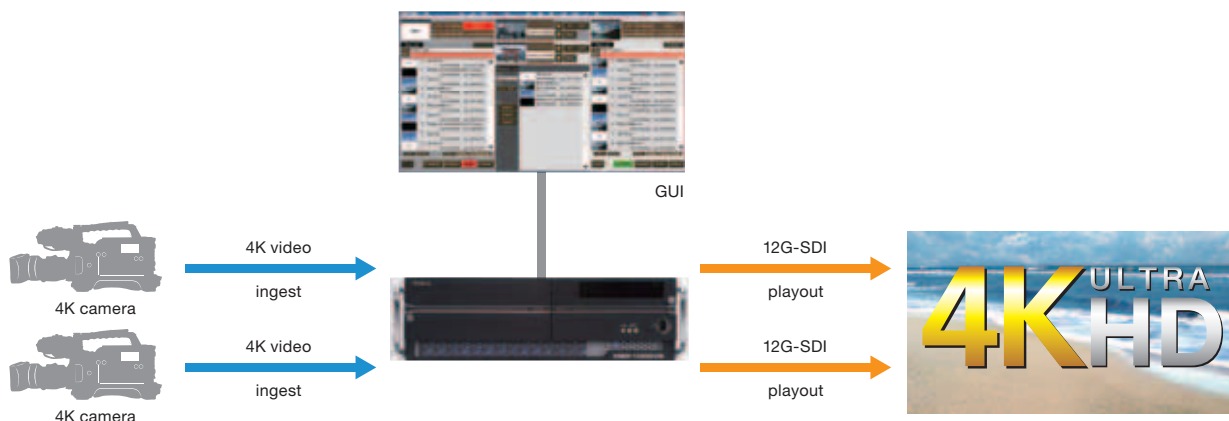
- Quad-channel 4K XAVC codec support. Standard configuration provides two channels for recording and two for playback. Can be configured with up to four channels for recording and four for playback.
- Choose from 12G-SDI or 3G-SDI I/O (maximum two inputs and two outputs via quad-link 3G-SDI).

MBP-1000VS-12G internal block diagram
(Using two channels for ingest and two for layout)



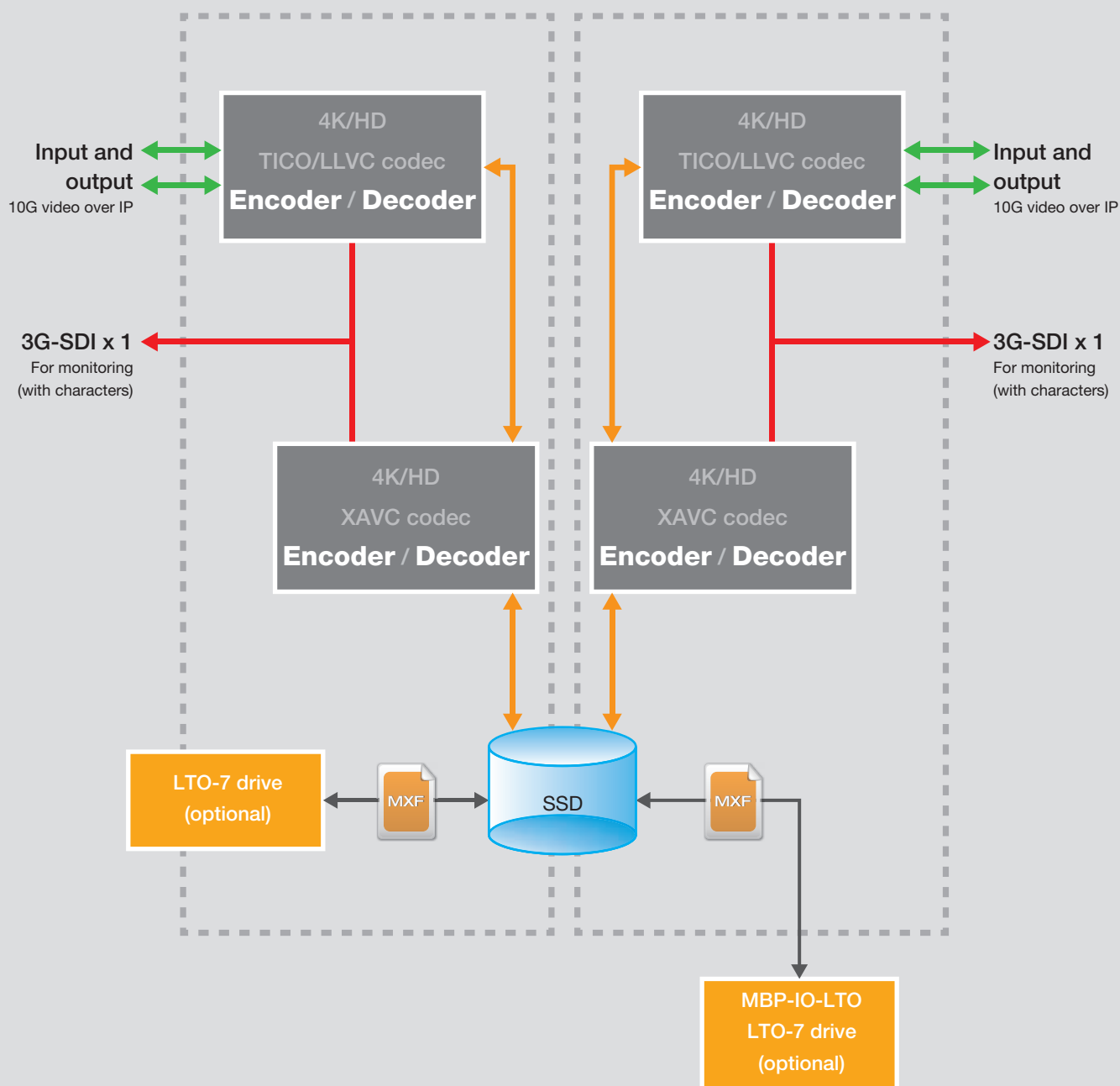
4K ingest/playout

Supports two channels of 4K I/O (via 12G-SDI or quad-link 3G-SDI) in environments requiring 4K ingest or other ultra high-resolution applications.



MBP-1000VS-IP

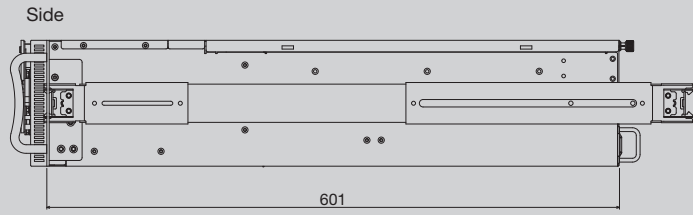
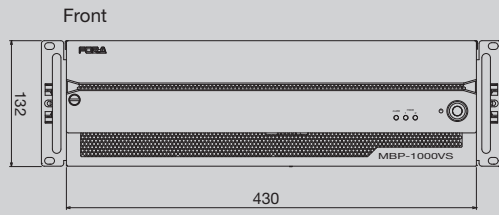
- Up to dual-channel 4K XAVC codec support. Switch channels from encoding to decoding as needed.
Codecs: XAVC Intra Class 480/300, MPEG-2 HD 422 (50 Mbps), MPEG-2 HD (35/25 Mbps)
- SFP+ port for up to two-channel 10 Gbps video over IP I/O
Supported formats (codecs): SMPTE 2022-6/7 (TICO), NMI (LLVC)
- Redundant SFP+ configuration available (two ports per channel)
- 50i, 50p options available

MBP-1000VS-IP-4K block diagram (2-channel 4K model)

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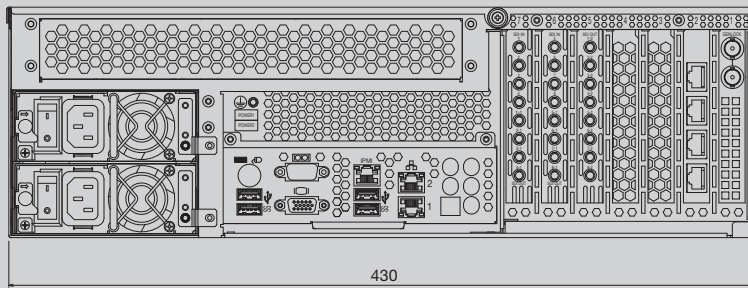
External view

Unit: mm

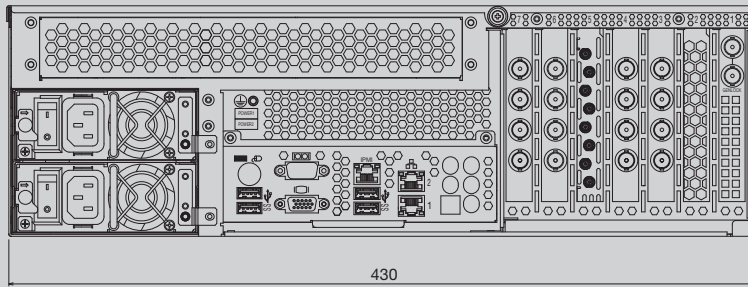


Rear view

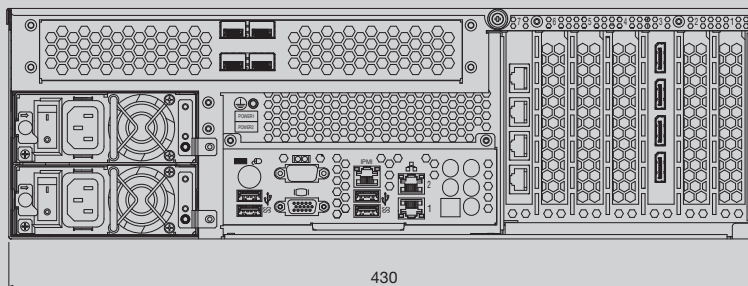
MBP-1000VS-P8



MBP-1000VS-12G



MBP-1000VS-IP



Specifications (Preliminary)

MBP-1000VS-	P4S-M4/P6S-M6/P8S-M8*1	12G-S/12G-S-M4*1	IPS-M4/M6/M8*1	IPS-4K/IPS-4K-M4*1
SSD				
System	240 GB			
Data	1.2 TB/2.4 TB/ 4.8 TB/9.6 TB	2.4 TB/4.8 TB/ 9.6 TB	1.2 TB/2.4 TB/ 4.8 TB/9.6 TB	2.4 TB/4.8 TB/ 9.6 TB
RAID type				
System	RAID1			
Data	RAID5/RAID50			
Codec				
MPEG-2	MPEG HD422: 1920 x 1080, 8-bit, 4:2:2, 50 Mbps MPEG HD: 1440 x 1080, 8-bit, 4:2:0, 35 Mbps MPEG HD: 1440 x 1080, 8-bit, 4:2:0, 25 Mbps	12G-S: —	MPEG HD422: 1920 x 1080, 8-bit, 4:2:2, 50 Mbps MPEG HD: 1440 x 1080, 8-bit, 4:2:0, 35 Mbps MPEG HD: 1440 x 1080, 8-bit, 4:2:0, 25 Mbps	IPS-4K: — IPS-4K-M4: MPEG HD422: 1920 x 1080, 8-bit, 4:2:2, 50 Mbps MPEG HD: 1440 x 1080, 8-bit, 4:2:0, 35 Mbps MPEG HD: 1440 x 1080, 8-bit, 4:2:0, 25 Mbps
		12G-S-M4: MPEG HD422: 1920 x 1080, 8-bit, 4:2:2, 50 Mbps MPEG HD: 1440 x 1080, 8-bit, 4:2:0, 35 Mbps MPEG HD: 1440 x 1080, 8-bit, 4:2:0, 25 Mbps		
XAVC™	—	Class 480, 300	—	Class 480, 300
Number of channels	MPEG-2 (Maximum: 8)	MPEG-2 (Maximum: 8) XAVC (Maximum: 4)	MPEG-2 (Maximum: 8)	MPEG-2 (Maximum: 8) XAVC (Maximum: 4)
Video formats				
HD	1080/59.94i		1080/59.94i (50i option planned)	
4K	—	2160/59.94p	—	2160/59.94p (50p option planned)
IP				
IP formats	—		SMPTE, NMI Genlock: SMPTE 2059	
Video inputs				
Maximum number of inputs	4/6/8	12G-S: 8 (HD) 4 (4K) 12G-S-M4: 4 (HD) 2 (4K)	4/6/8	IPS-4K: 8 (HD) 4 (4K) IPS-4K-M4: 4 (HD) 2 (4K)
HD	1.5 Gbps, 75Ω, BNC x 4/ DIN 1.0/2.3 x 8	12G-S: 1.5 Gbps, 75Ω, BNC x 8 12G-S-M4: 1.5 Gbps, 75Ω, BNC x 4	4- and 6-channel models: SFP+ (10 Gbps) x 1 8-channel model: SFP+ (10 Gbps) x 2	IPS-4K: 1.5 Gbps, 75Ω, BNC x 8 IPS-4K-M4: 1.5 Gbps, 75Ω, BNC x 4
4K	—	3G: 3 Gbps x 4, 75Ω, BNC x 4 12G: 12 Gbps, 75Ω, HD-BNC x 4	—	SFP+ (10 Gbps) x 2
Video outputs				
Maximum number of outputs	4/6/8	12G-S: 8 (HD) 4 (4K) 12G-S-M4: 4 (HD) 2 (4K)	4/6/8	IPS-4K: 8 (HD) 4 (4K) IPS-4K-M4: 4 (HD) 2 (4K)
HD	1.5 Gbps, 75Ω, BNC x 8/ DIN 1.0/2.3 x 16	12G-S: 1.5 Gbps, 75Ω, BNC x 8 12G-S-M4: 1.5 Gbps, 75Ω, BNC x 4	1.5/3 Gbps, 75Ω, 4–8 BNC connectors (with characters) 4- and 6-channel models: SFP+ (10 Gbps) x 1 8-channel model: SFP+ (10 Gbps) x 2	IPS-4K: 1.5 Gbps, 75Ω, BNC x 8 IPS-4K-M4: 1.5 Gbps, 75Ω, BNC x 4
4K	—	3G: 3 Gbps, 75Ω, BNC x 4 12G: 12 Gbps, 75Ω, HD-BNC x 4	—	SFP+ (10 Gbps) x 2
Audio I/O				
Embedded	Up to 8 channels (four stereo pairs, group 1/2), 16/20/24-bit, 48 kHz			
AES	1.0 Vp-p, unbalanced, 75Ω, DIN x 8 (input) / x 8 (output) (stereo x 2), 16/20/24-bit, 48 kHz			
Time code I/O				
Embedded	SMPTE RP188 ATC (MTC or LTC)			
LTC	1.0 Vp-p, unbalanced, 75Ω, DIN x 8 (I/O)			
Time code display	Yes			
Text display	Yes			
Encoding playback channels	P4: 2/P6: 3/P8: 4	12G-S: 2 (4K) 12G-S-M4: 1 (4K) 2 (HD)	M4: 2/M6: 3/M8: 4	IPS-4K: 2 (4K) IPS-4K-M4: 1 (4K) 2 (HD)

Specifications (Preliminary)

MBP-1000VS-	P4S-M4/P6S-M6/P8S-M8*1	12G-S/12G-S-M4*1	IPS-M4/M6/M8*1	IPS-4K/IPS-4K-M4*1
Genlock				
Input	BB: NTSC 0.429 Vp-p or Tri-level Sync: 0.6 Vp-p, 75Ω, BNC x 1, loop-through (to be terminated with 75Ω terminator, if unused)			
Interfaces				
KEY BOARD	PS/2 x 1 (rear)			
MOUSE	PS/2 x 1 (rear)			
RS-232C	9-pin D-sub (male) x 1			
VGA	9-pin D-sub (male) x 1			
USB	USB 3.0 (Standard-A connector) x 6 (2 ports front, 4 rear)			
LAN	100BASE-TX/1000BASE-T, RJ-45 x 6 (2 ports built in, 4 on PCIe expansion card)	100BASE-TX/1000BASE-T, RJ-45 x 2	100BASE-TX/1000BASE-T, RJ-45 x 4 (2 ports built in, 2 on PCIe expansion card)	
IPMI	100BASE-TX/1000BASE-T, RJ-45 x 1			
Others				
Redundant power supply	Yes			
Temperature/humidity	10°C to 35°C/20% to 80% (no condensation)			
Power	100 V to 240 V AC ±10%, 50/60 Hz			
Dimensions/weight	430 (W) x 132 (H) x 600 (D) mm, EIA 3RU (excluding front panel)/approx. 28 kg			
Consumables (approx. time for replacement after an uninterrupted service at room temperature)	Power unit: Replace every 5 years, Battery: Replace every 5 years, Cooling fans: Replace every 3 years			
Options	MBP-10IO: AES x 8, LTC x 8, RS-422 x 8, GPI x 64			

*1 The number (1, 2, 4, 9) after the "S" in the model name shows SSD capacities of 1.2 TB, 2.4 TB, 4.8 TB, and 9.6 TB, respectively. 1.2 TB available only for the MBP-1000VS-P series. (Example: MBP-1000VS-P4S2 is a P4S model with an SSD capacity of 2.4 TB)

Recording time for SSD capacities

Model name*2	S1	S2	S4	S9	
SSD	1.2 TB	2.4 TB	4.8 TB	9.6 TB	
Recording time	XDCAM (50 Mbps)	Approx. 39 hours	Approx. 79 hours	Approx. 159 hours	Approx. 318 hours
	XAVC (Class 100)	Approx. 19 hours	Approx. 38 hours	Approx. 77 hours	Approx. 155 hours
	4K-XAVC (Class 300)	—	Approx. 7 hours	Approx. 15 hours	Approx. 31 hours
	4K-XAVC (Class 480)	—	Approx. 4 hours	Approx. 9 hours	Approx. 19 hours

*2 Model names that include S1, S2, S4, or S9

XAVC is a trademark of Sony Corporation.

Specifications subject to change without notice. Information valid as of November 2017.



Head Office: 3-8-1 Ebisu, Shibuya-ku, Tokyo 150-0013, Japan

ISO 9001 and 14001 certified (Sakura R&D)

<http://www.for-a.com/>

FOR-A Corporation of America Corporate Office:
11155 Knott Ave., Suite G&H, Cypress, CA 90630, U.S.A.

Tel: +1-714-894-3311

FOR-A Italia S.r.l.:
Via Volturmo, 37, 20861, Brugherio MB, Italy

Tel: +39-039-881-086/103

FOR-A Corporation of America Northeast Office:
2 Executive Drive, Suite 670, Fort Lee, NJ 07024, U.S.A.

Tel: +1-201-944-1120

FOR-A Corporation of Korea:
1007, 57-5, Yangsan-ro, Yeongdeungpo-gu, Seoul 150-103, Korea

Tel: +82-(0)2-2637-0761

FOR-A Corporation of America Southeast Office:
8333 North West 53rd Street, Suite 450, Doral, FL 33166, U.S.A.

Tel: +1-305-931-1700

FOR-A China Limited:
1307 Huateng Building, No. 302, 3 District, Jinsong, Chaoyang, Beijing 100021, China

Tel: +86-(0)10-8721-6023

FOR-A Corporation of America Service Center:
2400 N.E. Waldo Road, Gainesville, FL 32609, U.S.A.

Tel: +1-352-371-1505

FOR-A Middle East-Africa Office:
Dubai Media City, Aurora Tower, Office 1407, P.O. Box 502688, Dubai, UAE

Tel: +971-(0)4-551-5830

FOR-A Europe S.r.l.:
Via Volturmo, 37, 20861 Brugherio MB, Italy

Tel: +39-039-879-778

Agiv FOR-A India Private Limited:
2nd Floor, Valecha Chambers, Link Road, Andheri (W), Mumbai 400053, India

Tel: +91-22-2673-3623

FOR-A UK Limited:
Trident Court, 1 Oakcroft Road, Chessington, KT9 1BD, UK

Tel: +44-(0)20-3044-2935

FOR-A South East Asia Office:
Studio 09, Rm. A1, 3/F., Phase 1, Hang Fung Ind. Bldg., 2G Hok Yuen St., Hung Hom, Hong Kong

Tel: +852-2110-1352