

HVS-100/110 Datasheet

1. Specifications

HVS-100 Basic specifications

Temperature	0°C to 40°C
Humidity	30% to 90% (no condensation)
Power	100VAC to 240 VAC \pm 10%, 50/60Hz
Consumption	Standard: 106 W (at 100-120 VAC), 97 W (at 220-240 VAC) Full Option: 207 W (at 100-120 VAC), 198 W (at 220-240 VAC)
Dimensions	430 (W) x 225 (D) x 88 (H) mm 480 (W) (Including rack mount brackets)
Weight	5.3 kg (in Standard), 6.9 kg (in Full Option)
Consumables (at 24-hour operation)	Power supply unit: Replace every 5 years. HVS-100PSM: Replace every 5 years. Cooling fan: Replace every 4 years

HVS-100 Technical specifications

Video formats	1080i/59.94, 50 1080p/23.98, 24, 25, 29.97 1080PsF/23.98, 24, 25, 29.97 720p/59.94, 50 525/60 (NTSC), 625/50 (PAL)	
HVS-100EXP3G	1080p/59.94, 50	
Video input	HD-SDI: 1.5 Gbps or SD-SDI: 270 Mbps 75 Ω BNC x 8	
Video input (option)	Max. 2 cards. (Max. 3 cards including input/output cards.)	
HVS-100EXP3G	3G-SDI (Level-A/Level-B): 3Gbps	
HVS-100DI-A	HD-SDI: 1.5 Gbps or SD-SDI: 270Mbps 4 inputs or 2 inputs BNC	
HVS-100AI	HD/SD analog component or analog composite 1.0 Vp-p 2 inputs BNC	
HVS-100PCI (RGB)	1080p: XGA to WUXGA (1080p/50, 59.94), HDTV 1080i: XGA to WUXGA, HDTV 720p: XGA to WXGA, HDTV SD: VGA to XGA, SDTV 2 inputs (HDCP not compatible) HDMI (type A), VGA	
Number of video inputs	Standard: 8	(SDI x 8)
	Max.: 14	(SDI x 14) or (SDI x 12 and Analog/RGB x 2)
Video output	HD-SDI: 1.5 Gbps or SD-SDI: 270 Mbps 75 Ω BNC x 4 (AUX1-AUX4. Crossfade switching available)	
	HDMI:	HDTV (1080p 1080i, 720p) SDTV (SD) (HDCP not compatible) HDMI (type A) x 1
Video output (option)	Max. 2 cards. (Max. 3 cards including input/output cards.)	

HVS-100EXP3G	3G-SDI (Level-A): 3Gbps	
HVS-100DO	HD-SDI: 1.5 Gbps or SD-SDI: 270 Mbps 2 outputs BNC	
HVS-100AO	HD/SD analog component or analog composite 1.0 Vp-p 2 outputs BNC	
HVS-100PCO (HDMI: RGB)	2 outputs (HDCP not compatible), HDMI (type A), VGA 1080p: XGA~WUXGA (except 1080p/23.98, 24), HDTV 1080i: SXGA to WUXGA, HDTV 720p: SXGA, WXGA, HDTV SD : SVGA, SDTV	
(VGA)	1080i: SXGA to WUXGA (RGB), HDTV (YPbPr) 720p: SXGA, WXGA (RGB), HDTV (YPbPr) SD : SVGA (RGB)	
Number of video outputs	Standard: 5	(SDI x 4, HDMI x1)
	Max.: 9	(SDI x 4, HDMI x1, SDI/Analog/RGB x 4)
Genlock input	BB: NTSC: 0.429 Vp-p/PAL: 0.45Vp-p or Tri-level Sync: 0.6 Vp-p 75Ω BNC x 1, loop-through (Terminate with 75Ω terminator, if unused.)	
Genlock phase adjust	Horizontal: ±1H	
Genlock output	BB: NTSC: 0.429 Vp-p/PAL: 0.45Vp-p or Tri-level Sync: 0.6 Vp-p 75Ω BNC x 1	
Signal processing	4:2:2 Digital component	
Quantization	HD/SD-SDI: 10-bit	
FS / Process Amp	Frame Synchronizer and Process Amp features on each input	
Effect		
Pattern	WIPE	100 patterns, Border and Softness
	2D DVE	36 patterns
Sub-effect channel	x 2 (SBEF1 and SBEF2) available on inputs	
Transition	Execution: Fader lever, AUTO or CUT button Type: MIX or WIPE (DVE included)	
Still/Clip memory	2 still buffers with backup feature 2 clip buffers, Recording capacity: 7.5 seconds (HD video)for each	
Key		
KEY/DSK	x 4 (KEY x 2 and DSK x 2) Luminance, Full or Bus key, KEY1, KEY2: Edge/shadow effects DSK1, DSK2: Direct display on AUX outputs possible	
Chroma key channel	x 1 (used for switcher source / direct output)	
DVE channel	x 4 (2D) Available on BKGD, KEY and DSK	
Multiviewer channel	x 1 with 2/4/5/7/9/10/11/16-way split views Display: Title, Tally, Audio Level Meter, Safety Area and Frame Border Layout backup: Up to 8 patterns 1 frame delay relative to PGM output	

Event memory	100 events	
Video phase adjust	±0.5 H (1080/50p Level-B: -0.3 H to +0.7H)	
I/O delay	Minimum delay:	HD: 1H, SD: 1H
	If FS or Up-resize engine used:	1-2 frames + Minimum delay
	If FS or Up-resize engine plus DVE used:	2-3 frames + Minimum delay
	FS or Up-resize engine plus Output resize engine and DVE used:	3-4 frames + Minimum delay
Interfaces		
TO OU	For HVS-100OU connection, RJ-45 x 1	
LAN	100Base-TX/100BASE-T RJ-45 x 1	
GPI IN/TALLY OUT	25-pin D-sub (female) x 1 (inch screw) 24-input/output (GPI input/output and tally output programmable) Open collector or no-voltage contact input, open collector output	
RS-422	9-pin D-sub (female) x 2 (with inch screws) * For VTR, router and tally unit connection	
USB MEMORY (Front side)	For USB flash drive connection, USB1.1, Type A connector x 1	

HVS-100 Options

HVS-100ARC	Arcnet I/F Card
HVS-100ED	Editor Control Software
HVS-100EXP3G	3Gbps Expansion Software
HVS-100PSM	MU Redundant Power Supply Unit
HVS-100DI-A	4 Channel Digital Input Card
HVS-100AI	2 Channel Analog Input Card
HVS-100PCI	2 Channel VGA/HDMI Input Card
HVS-100DO	2 Channel Digital Output Card
HVS-100AO	2 Channel Analog Output Card
HVS-100PCO	2 Channel VGA/HDMI Output Card
HVS-100VR	Virtual Link Software
HVS-100IS	Infinity Set Link Software

HVS-100 Accessories

AC cord, Quick setup guide, CD-ROM, and EIA rack mount brackets

HVS-100OU Basic specifications

Temperature	0°C to 40°C
Humidity	30% to 90% (no condensation)
Power	100VAC to 240 VAC \pm 10%, 50/60Hz DC 12V (Supplied from the AC adapter)
Consumption	13W (at 100-120V AC), 14W (at 100-120V AC)
Dimensions	420 (W) x 246 (D) x 87.2 (H) mm
Weight	2.6 kg
Consumables (at 24-hour operation)	Power supply unit: Replace every 5 years. HVS-100PSO: Replace every 5 years.

HVS-100OU Technical specifications

Interfaces	
TO MU (LAN)	For HVS-100 connection, RJ-45 x 1

HVS-100OU Options

HVS-100PSO	OU Redundant Power Supply Unit
EIA Rack Mount Brackets	

HVS-100OU Accessories

MU and Control panel connecting cable, and AC adapter

HVS-110 Basic specifications

Temperature	0°C to 40°C
Humidity	30% to 90% (no condensation)
Power	100VAC to 240 VAC \pm 10%, 50/60Hz DC 12V / 16 A (Supplied from the AC adapter)
Consumption	100 W (at 100-120 VAC) , 99 W (at 220-240 VAC)
Dimensions	420 (W) x 246 (D) x 129.3 (H) mm
Weight	5.6 kg (in Standard (including AC adapter)), 6.4 kg (with HVS-110PSM installed)
Consumables (at 24-hour operation)	Power supply unit: Replace every 5 years. HVS-110PSM: Replace every 5 years. Cooling fan: Replace every 4 years

HVS-110 Technical specifications

Video Formats	1080i/59.94, 50 1080p/23.98, 24, 25, 29.97 1080PsF/23.98, 24, 25, 29.97 720p/59.94, 50 525/60 (NTSC), 625/50 (PAL)	
HVS-100EXP3G	1080p/59.94, 50	
Video Input	HD-SDI: 1.5 Gbps or SD-SDI: 270 Mbps 75 Ω BNC x 12	
HVS-100EXP3G	3G-SDI (Level-A/Level-B) : 3Gbps	
Video Output	HD-SDI: 1.5 Gbps or SD-SDI: 270 Mbps 75 Ω BNC x 8 (AUX1-AUX8. Crossfade switching available)	
HVS-100EXP3G	3G-SDI (Level-A): 3Gbps	
	HDMI:	HDTV (1080i, 720p) SDTV (SD) HDCP unsupported HDMI type A connector x 1
Genlock Input	BB: NTSC: 0.429 Vp-p/PAL: 0.45Vp-p or Tri-level Sync: 0.6 Vp-p 75 Ω BNC x 1, loop-through (Terminate with 75 Ω terminator, if unused.)	
Genlock phase adjust	Horizontal: \pm 1H	
Genlock Output	BB: NTSC: 0.429 Vp-p/PAL: 0.45Vp-p or Tri-level Sync: 0.6 Vp-p 75 Ω BNC x 1	
Signal Processing	4:2:2 Digital component	
Quantization	HD/SD-SDI: 10-bit	
FS / Process Amp	Frame Synchronizer feature on INPUT01-08 Process Amp feature on each input	
Effect		
Pattern	WIPE	100 patterns, Border and Softness
	2D DVE	36 patterns
Sub-effect channel	x 2 (SBEF1 and SBEF2) available on inputs	
Transition	Execution: Fader lever, AUTO or CUT button Type: MIX or WIPE (DVE included)	

Still/Clip Memory	2 still buffers with backup feature 2 clip buffers, Recording capacity: 7.5 seconds (HD video)for each	
Key		
KEY/DSK	x 4 (KEY x 2 and DSK x 2) Luminance, Full or Bus key, KEY1, KEY2: Edge/shadow effects DSK1, DSK2: Direct display on AUX outputs possible	
Chroma key channel	x 1 (used for switcher source / direct output)	
DVE channel	x 4 (2D) Available on BKGD, KEY and DSK	
Multiviewer channel	x 1 with 2/4/5/7/9/10/11/16-way split views Display: Title, Tally, Audio Level Meter, Safety Area and Frame Border Layout backup: Up to 8 patterns 1 frame delay relative to PGM output	
Event Memory	100 events	
Video phase adjust	±0.5 H (1080/50p Level-B: -0.3 H to +0.7H)	
I/O Delay	Minimum delay:	HD: 1H, SD: 1H
	If FS or Up-resize engine used:	1-2 frames + Minimum delay
	If FS or Up-resize engine plus DVE used:	2-3 frames + Minimum delay
	FS or Up-resize engine plus Output resize engine and DVE used:	3-4 frames + Minimum delay
Interfaces		
LAN	100Base-TX/1000BASE-T RJ-45 x 1	
GPI IN/TALLY OUT	25-pin D-sub (female) x 1 (inch screw) 24-input/output (GPI input/output and tally output programmable) Open collector or no-voltage contact input, open collector output	
RS-422	9-pin D-sub (female) x 2 (with inch screws) * For VTR, router, tally unit and editor connection	
USB MEMORY (Front side)	For USB flash drive connection, USB1.1, Type A connector x 1	

HVS-110 Options

HVS-100ARC	Arcnet I/F Card
HVS-100ED	Editor Control Software
HVS-100VR	Virtual Link Software
HVS-100IS	Infinity Set Link Software
HVS-100EXP3G	3Gbps Expansion Software
HVS-110PSM	Redundant Power Supply Unit
EIA Rack Mount Brackets	

HVS-110 Accessories

AC adaptor, Quick setup guide, and CD-ROM

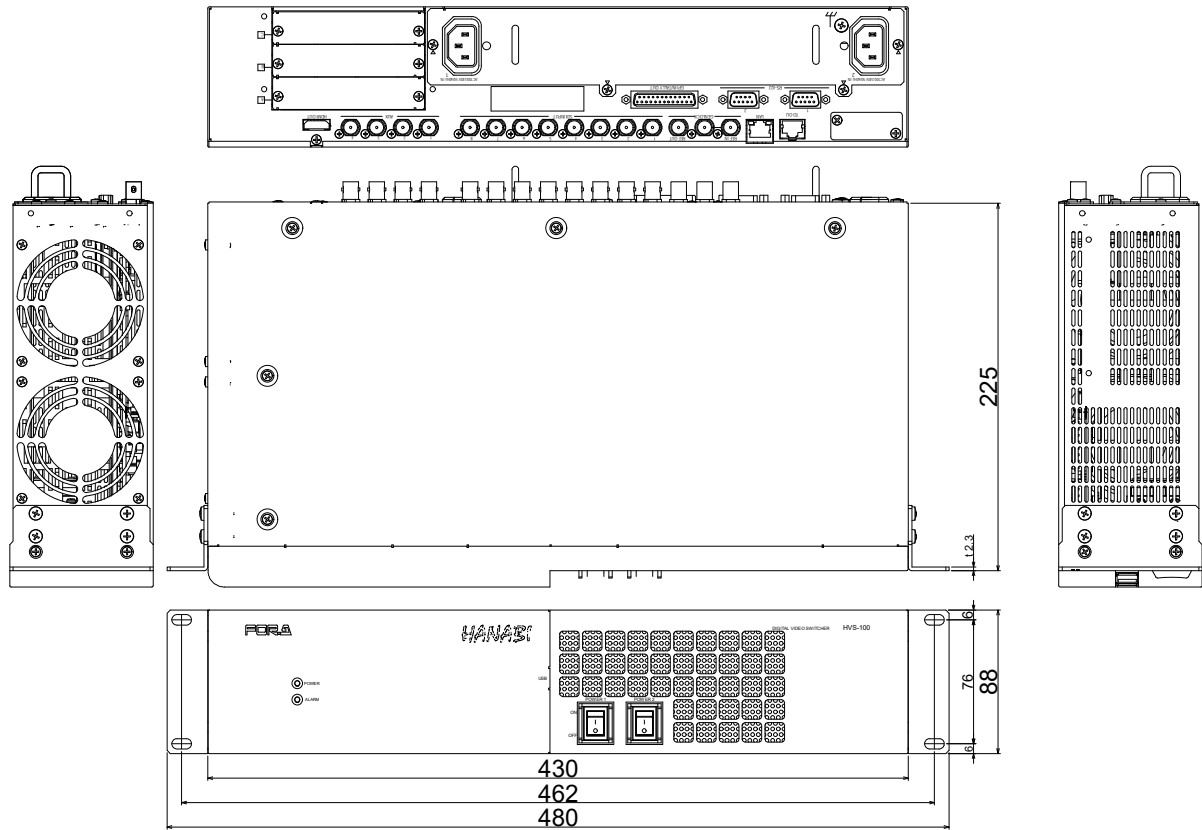
HANABI Series Options

HVS-AUX16A/16B/16C/16D/32A/64A	AUX Bus Control Box (Ethernet connection)
HVS-TALR32	Tally Control Unit (Relay type) (via RS-422)
HVS-TALOC32	Tally Control Unit (Open Collector type) (via RS-422)

2. External Dimensions

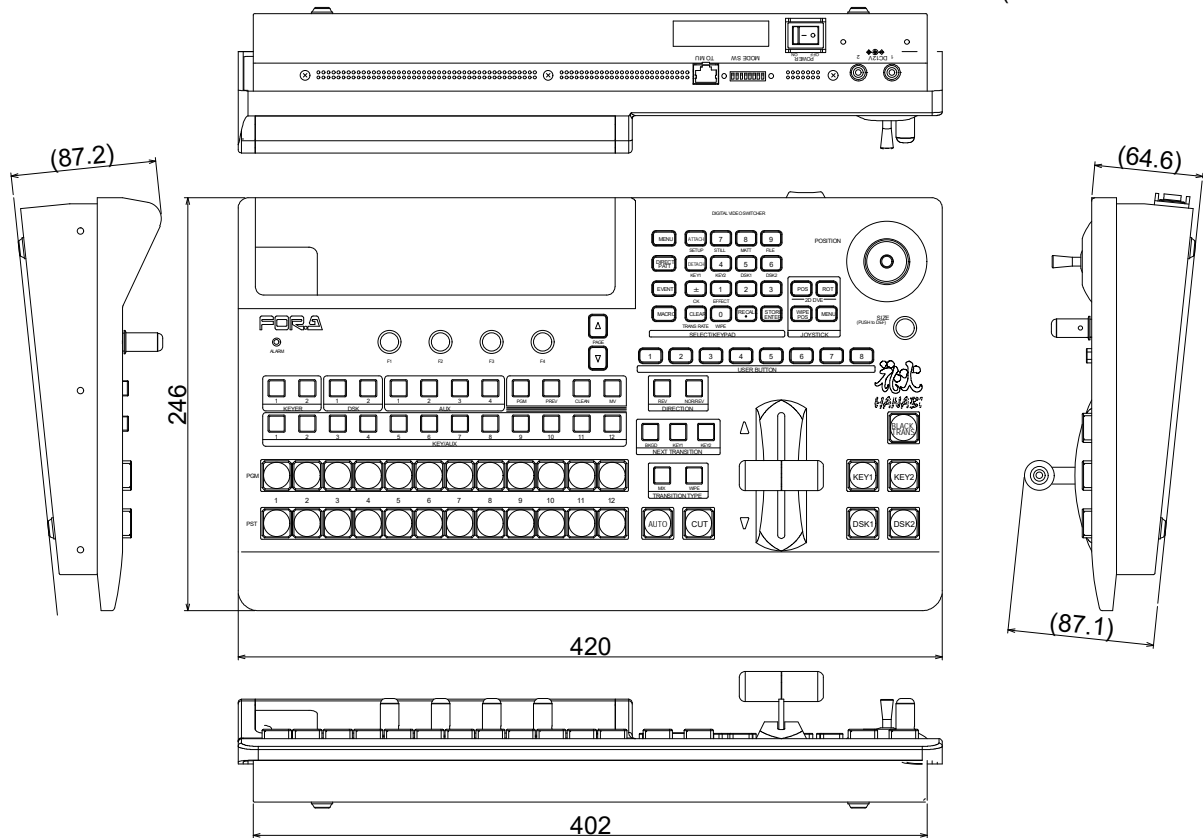
HVS-100

(All dimensions in mm.)



HVS-100OU

(All dimensions in mm.)



HVS-110

(All dimensions in mm.)

