



# GVS9000 1U ingest station

## GVS9000 1U-IS

The GVS9000 1U-IS is a cost effective, easily integrated solution for bringing RealTime DV to uncompress HD to any broadcasting environment. Whether you are ingesting via telecine, direct from camera, or tape, the GVS9000 1U-IS performs accurate live capture, playback and remote management. Without altering the original feed, multiple users can simultaneously preview ingest channels while recording is in progress.

Available options include:

- Simultaneous Ingest and Payout
- Sequenced Payout
- Advanced Scheduling
- Integrated Video Media Browser
- QuickTime (ingest and payout)
- DV25-DVCPRO HD (ingest and payout)
- Analog Audio/Video Input/Output
- Digital SDI Video AES/EBU Audio Input/Output
- VDCP Automation Control (optional)
- Remote Network Control
- Fibre Channel Storage (SAN integration)

Less Than

# 19" depth

low-profile rack mountable rugged system



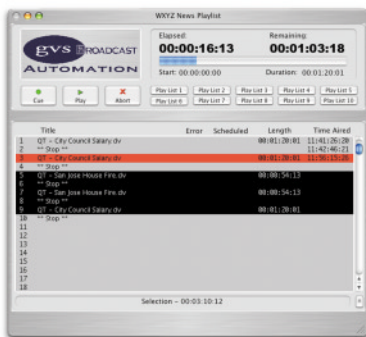
- Supports any uncompressed SD or HD format, including Dual Link
- Captures and plays back uncompressed 10-bit and 8-bit digital video and 24-bit 48kHz digital audio in standard definition (SMPTE 259M), high definition (SMPTE292M), and Dual Link high definition (SMPTE 372M).
- Supports Dual Link 4:4:4 HD-SDI
- Supports full bandwidth 4:2:2 10-bits (12-bit capable) for 1080i, 1080p, and 720p formats.
- Convert between 4:4:4 and 4:2:2 formats for single link HD-SDI output.

## GVS9000 1U-IS ingests the highest quality A/V content for editing and post-production

The GVS9000 1U-IS is a rugged, low profile rack mountable system occupying less than 19" deep rack space. It's innovative, completely ruggedized system designed with open architecture and extreme low power consumption provides you the ability to operate the system and access data even while in transit.

Users can quickly capture clips of any length and size in either manual, scheduled or remote mode. At only 1.75" high, several 1U-IS stations can be stacked in a compact area offering 16 concurrent recording options .

For online storage, the GVS9000 1U-IS is designed to work with the latest GVSAN and others SAN technology. Connect via 2-4GB fibre channel to the Nomadic4U or 3rd part fiber channel storage and GVS90004XU running GVS BASS (broadcast automation software solution) and you have a complete solution for ingest, storage, and broadcast in a shared environment.



Part Number	Model Number	Network Interface	Memory GB	Number Drive	SAN Interface	HD/SD Interface	Firewire Interface	Power Supply
GM1U2X502DB02	GVS90001U-ISA	Dual Gigabit	4.0	One	2GB Fiber	Analog	800/400	1
GM1U2X522DB04	GVS90001U-ISC	Dual Gigabit	8.0	Two	2GB Fiber	SDI	800/400	1
GM1U2X524DB06	GVS90001U-ISS	Dual Gigabit	16.0	Three	4GB Fiber	Analog/SDI	800/400	1



# GVS9000 1U-IS ingest station specifications

## Video Modes InPut:

- Rec/Play time Play visually lossless
- Dual Link with support
- 2K 2048 x 1556 24p, 24psF, 48i
- HD 1920x1080 4.4.4 1080psf 1080psf 23.98 1080i29.97
- SD D1 720x486 720p 60 720p 59.9
- SD D1 720x576 625i 525i 29.97

## Video Modes OutPut:

- Dual link 4:4:4 (RGB) I/O
- Dual link 4:2:2:4 Video + Key (YUV) I/O
- Single Link 4:2:2 (YUV) I/O

## Analog: SD and HD Output, 12-bits, BNC:

- HD: YPbPr, RGB
- SD: YPbPr, RGB (component mode)
- Composite/YC (composite mode)

## Audio:

- Quantization: 16-bit, 20-bit, 24-bit selectable
- 8 channels S/P DIF BNC audio
- 6 channels of AES/EBU XLR audio

## GVS9000 1U-IS technical specifications:

- Dual PowerPC® G5 processors
- Two slot PCI-X.
- 2-4GB Dual Fibre Channel
- 450 Watt Power supplies
- 8-16GB memory DDR400
- 8 Channels of embedded audio per SDI
- 48Khz synchronous
- Upgrade option available to 96Khz or 192 kHz audio support

## Genlock:

- Analog: SD: Black Burst, Bi-Level; HD: Tri-Level
- Digital: SD : SD SDI; HD : HD-SDI, QuLink

## Play Control:

- Dual 2Gb/s Fiber Interface for external GVSAN storage
- Dual 10/100/1000BT Network for small file transfer

## DV-DV50:

- RS-422: D-sub 9-pin
- RS-232: 3-sub 9-pin
- FireWire 800 port and FireWire 400
- USB 2.0 ports (on one front panel), two USB
- Back headphone minijack and speaker

## Operating shock:

- 2940 m/sec<sup>2</sup> (300 G)/2ms
- 1568 m/sec<sup>2</sup> (160 G)/1ms

## Nonoperating shock:

- 9800 m/sec<sup>2</sup> (1,000 G)/1ms

## Electrical and environmental requirements:

- Meets ENERGY STAR requirements
- Line voltage: 450W 100-125V AC or 200-240V AC
- Frequency: 50Hz to 60Hz, single phase
- Maximum current: 4.25A (low-voltage range)
- Operating temperature: 50° to 95°F (10° to 35°C)
- Relative humidity: 5% to 95% noncondensing
- Maximum altitude: 10,000 feet

## Size and weight:

- Height: 1.75 inches
- Width: 17.65 inches
- Depth: 19 inches
- Weight: 25 lb

The chart below is designed to provide viable information for calculating the storage requirements for your production environment based on 4.0TB storage and the total hours it delivers at different compression rates. It also gives a breakdown of how much storage you will need for 48 hrs. of video at these compression rates.

Time/Size Video Format	Compression Rate	Data Rate MB/sec	Storage For 1 Min/MB	15 Min. Require GB	Storage Required 1 Hour/GB	4 TB Provides Hours	48 Hrs. Requires STORAGE
SMPTE 259	1 to 1	270	16,200	243	972	4.1 hr	46,656 GB
1080p 4.4.4 10-bit 29.97	1.08 to 1	249	14,930	224	896	4.5 hr	42,998 GB
1080p 4.4.4 10-bit 25	1.3 to 1	207	12,420	186	745	5.4 hr	35,770 GB
1080p 4.4.4 10-bit 23.98	1.4 to 1	199	11,940	179	716	5.6 hr	34,387 GB
1080i 4.2.2 10-bit 59.94	1.5 to 1	166	9,953	149	597	6.7 hr	28,666 GB
1080i 4.2.2 10-bit 50	2 to 1	138	8,280	124	497	8.1 hr	23,846 GB
1080p 4.2.2 10-bit 23.98	2 to 1	133	7,980	120	479	8.4 hr	22,982 GB
720p 4.2.2 10-bit 59.94	2 to 1	133	7,980	120	479	8.4 hr	22,982 GB
1080i 4:2:2 8-bit 59.94	2 to 1	124	7,465	112	448	8.9 hr	21,500 GB
1080i 4.2.2 8-bit 50	3 to 1	104	6,221	93	373	10.7 hr	17,916 GB
720p 4.2.2 8-bit 59.94	3 to 1	100	6,000	90	360	11.1 hr	17,280 GB
1080p 4.2.2 8-bit 23.98	3 to 1	100	6,000	90	360	11.1 hr	17,280 GB
MJPEG	6 to 1	45	2,700	41	162	24.7 hr	7,776 GB
MPEG2	8 to 1	34	2,025	30	122	32.9 hr	5,832 GB
SD 10-bit Uncompress	10 to 1	28	1,680	25	101	39.7 hr	4,838 GB
SD 8-bit Uncompress	13 to 1	21	1,242	19	75	53.7 hr	3,577 GB
DVCPRO HD	22 to 1	13	750	11	45	88.9 hr	2,160 GB
DV50	43 to 1	6	375	6	23	177.8 hr	1,080 GB
MPEG2	65 to 1	4	240	4	14	277.8 hr	691 GB
DV25	87 to 1	3	186	3	11	358.4 hr	536 GB
MPEG1	194 to 1	1	83	1	5	799.4 hr	240 GB

Product specifications are subject to change without notice.

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