GVS9000 4XU Pro ruggedized editing system

GVS9000 4XU Pro RES

Running on the most powerful 64-Bit OS, 64-Bit machine in the industry, Windows, OS X and Linux, GVS9000 4XU Pro Six-core offers users the utmost in expansion capability. The 4XU Pro delivers outstanding performance for demanding applications where stability and speed are crucial elements in industries such as Aerospace, Audio/ Video HD editing, Biotechnology, Communications, Defense, Education, Manufacturing, Medical Imaging, Mobile equipment, Oil & Gas, Pharmaceutical, TV Station, Visualization and many others. The GVS9000 4XU Pro comes with internal 12TB storage capacity capable of reaching speeds of 1,200MB/sec. It has a rugged 64-bit application code, complete 4U 19" deep rack space, and rugged design giving you a single product for in-office or on-the-road production.

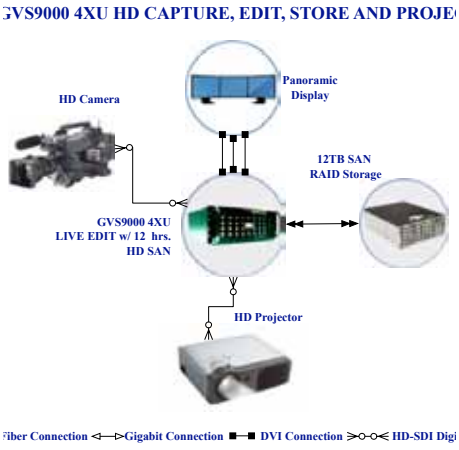
real-time edit 2560 by 1600 pixels

4XU Pro 12.0TB

Storage

System includes:

- Dual Six-core Processors
- 4 PCI-e 16x, 4x, 8x, 4x slots
- 4x3,000GB SATAII or 1,000GB SSD Drive.
- Dual 8GB Fibre card
- 4x3,000GB/2,000GB SATA/SAS 7200/10,000 RPM drives
- SSD channel drive interfaces
- 4 removable drive bay
- 6GB SAS Drive Support
- 4U Rack Rail 19" rack deep
- PCI-e H/W RAID 0, 1, and 5
- Dual DDR5 5870 ATI 1.0GB
- Single power supplies
- Up to 256GB 8 DIMM sockets
- Dual Gigabit Interface
- Dual layer DVD/RW-CD/RW drive
- Firewire 800, Bluetooth 2.1, Optical digital audio in and out 96KHz 130 dB



4XU Pro Rugged Editing System

The 4XU Pro , with 4 internal drive bays, all in a 4U RACK less than 19" deep, offers a processor speed of Dual 6-core, up to 3.46 GHz, and 12,000KB of dedicated L3 cache memory per processor, four full-length 16X PCI-e slots, and 128GB of DDR3 1333 32GB/s Max memory bandwidth which can be upgraded to 256GB. Additional options include: 4x3,000GB SATAII drives up to 72000RPM or 2,000GB SAS drive up to 10,000RPM, with less than 3.6ms seek time configured, dual Gigabit Ethernet up to 2, 4, up to 8xDVI and HDMI display interface, with Windows, Linux or OS X operating systems.

The GVS9000 4XU Pro models are designed to be ideal on the road, containing everything you need in a portable, rugged designed 19" deep rack or a tower configuration with the lowest noise level in its class of family.

The 4XU Pro models include RAM support of 256GB, internal storage up to 12TB with optional 15,000 RPM or 1TB SSD drives running at speeds of 600MB/sec, making it ideal for mobile vehicle and Live Event recording, as well as for 3D Design, Animation and Visualization applications. The unique feature of the GVS9000 4XU Pro is the internal 6GB SAS Storage option that allows you to instantaneously share your content. With the 4XU Pro, you have your project available to everyone on the SAS network, at speeds of 6Gb/sec.

Part Number	Storage	CPU	Memory GB	L3 Cache	Optical Drive	Graphics Card	Total Storage	Gigabit Interface
G4UP25040160-003	3000GB at 300MB/sec	4XCPU 2.5GHz	16GB max 256GB	12,000KB	16xDVD/R	Quadro FX 4500 512MB	4x1,00GB SATAII	2

Part Number	Storage	Speed	Interface	Drive Cache	Number Drive	Drive Model	Number Display	PCI-e RAID
G04UP-12A2P2F-24	4TB	600MB/sec	2xFiber	64MB	4	SATAII/SAS/4GB Fiber	2-4	0,1, 5 and 6

Part Number	Type	Speed	Interface	Drive Interface	Number Fibre	Description	SFP Optical	# SFP
PCI-e Fiber	Dual Fibre	8x	PCI-e	2xFibre	2 ports	Fibre Channel PCI-e	Optional	2

GVS9000 4XU Pro ruggedized editing system technical specs

Processing:

- Dual 6-Core Intel 3.46 GHz, 6.40GT/s Intel® QPI Xeon series processors microprocessors
- Processor architecture with 64-bit data paths and registers; each core includes:
  - 16MB on-chip L2 cache running 12 MB of shared L3 cache per processor
  - Intel® Turbo Boost Technology
  - Hyper-Threading Technology (Intel® HT Technology) delivers thread-level parallelism on each processor
  - Intel® Virtualization Technology (Intel® VT)
  - AES New Instructions
  - Advanced three-component branch prediction logic
- Thermal Monitoring Technologie
- Intel 64 architecture improves performance by allowing systems to address more than 4 GB of both virtual and physical memory
- Enhanced Intel SpeedStep® Technology

Memory

- 128-bit memory controller and data paths
- PC3-10600E, 1333 MHz, DDR3 SDRAM UDIMMs (memory operates at 1066 MHz or 1333 MHz, depending on the processor)
- Eight DIMM slots supporting 72-bit wide, 240-pin ECC modules
- Support for the following DIMMs (in pairs):
  - 2GB DIMMs (DDR3-1066, 1066Mhz)
  - 4GB DIMMs (DDR3-1066, 1066Mhz)
  - 8GB DIMMs (DDR3-1066, 1066Mhz)
  - 16GB DIMMs (DDR3-1066, 1066Mhz)

Graphics and displays

- 16-lane PCI Express 2.0 graphics slot with one of the following graphics cards installed:
  - ATI Radeon HD 5770 with 1GB of fast GDDR5 memory comes standard dual-link DVI port
  - ATI Radeon HD 5870 with 1GB of fast GDDR5 memory comes standard, ideal motion graphics, 3D modeling, rendering, and animation
  - Support for graphics cards that require up to 150W
  - Dual-display and triple-display modes Support for digital resolutions up to 1920 by 1200 pixels; dual-link DVI ports support Max resolution: 2560x1600 pixels GDDR5 interface with 153.6 GB/sec
  - Engine clock speed: 850 MHz
  - Processing power (single precision): 2.72 TeraFLOPS
  - Processing power (double precision): 544 GigaFLOPS
  - Polygon throughput: 850M polygons/sec
  - Data fetch rate (32-bit): 272 billion fetches/sec
  - Texel fill rate (bilinear filtered): 68 Gigatexels/sec
  - Pixel fill rate: 27.2 Gigapixels/sec
  - Anti-aliased pixel fill rate: 108.8 Gigasamples/sec
  - Memory clock speed: 1.2 GHz
  - Memory data rate: 4.8 Gbps
  - Memory bandwidth: 153.6 GB/sec

Storage

- Four Serial ATA 3Gb/s controllers supporting up to 6.0-GBps data throughput per hard drive on board with N4424 Interface
- Up to 4 Serial ATA supporting up to 600-MBps data throughput per drive with PCI-e host card
- 4x3.5-inch hard drive expansion bays with removable drive bay support
  - Serial ATA, SAS and 4/8GB Fibre support
  - 2,000GB and 3,000GB 7200-rpm Serial ATAII drive installed in any custom configurations
  - 1,000GB and 2,000GB 10,000-rpm SATA drive installed in any custom configurations
  - 600GB and 1,000GB 15,000-rpm drive installed in any number of configurations
  - 480GB SSD drive installed in any number of configurations
  - Support for up to 6 internal 1,000GB SSD drives, 6,000GB maximum system capacity
  - 64MB memory buffers on all hard drives 2,000GB and more
- One slim Optical drive bay
- 18x Slim optical drive with single-layer support (DVD+R DL/DVD±RW/CD-RW); writes DVD-R discs at up to 8x speed, writes DVD+R DL discs at up to 6x speed, reads DVDs at up to 8x speed, writes CD-R and CD-RW discs at up to 24x speed, reads CDs at up to 32x speed

PCI expansion

- Four PCI Express slots of the following configurations:
- Four full-length PCI Express expansion slots (slot 1 contains the graphics card)
- Slots 1 and 2 are x16, PCI Express 2.0 slots
- Slots 3 and 4 are x4, PCI Express 2.0 slots
- All four slots support 16-lane cards, 300 W combined maximum for all PCI Express slots

Communications

- Two independent 10/100/1000BASE-T IEEE 802.3 Ethernet (RJ-45) interfaces
- Wireless data rate: Up to 3 Mbit/s, Range: Up to 33 feet or 10 meters (data rates may vary, depending on environmental conditions), Frequency band: 2.4 gigahertz (GHz)
  - Frequency band: 2.4 and 5 gigahertz (GHz), Radio output power: 20 dBm (nominal)
  - Bluetooth: Support for Enhanced Data Rate, or data rates up to 3 Mbps
- Optional external USB Modem (RJ-11)
- Integrated wireless antenna

Peripherals and audio

- Two FireWire 800 port 100, 200, 400, and 800 Mbit/s
- Four USB 2.0 ports
- Front headphone minijack and speaker
- Optical digital audio: Based on a typical situation with playback of a 1 kHz, 0 dBFS 24-bit sine wave, 44.1 kHz output sample rate, unless otherwise specified below.
- Output sample rate: 44.1 kHz, 48 kHz, or 96 kHz Â Signal-to-noise ratio: Greater than 130 dB Â Total harmonic distortion + noise: Less than -130 dB (0.00003 percent)

Electrical and environmental requirements

- Meets ENERGY STAR requirements
- Line voltage: 100 – 125V AC or 200 – 240V AC (wide-range power supply input voltage)
- Frequency: 50Hz to 60Hz, single phase
- Maximum current: At least 5A (low-voltage range) or 12A (high-voltage range) Frequency: 50–60 Hz single phase
- Operating temperature: 50°–95°F (10°–35°C)
- Storage temperature: -40°–149°F (-40°–65°C)
- Relative humidity: 5% to 95% noncondensing
- Maximum altitude: 10,000 feet

Size and weight

- Height: 7.46 inches (189 mm)
- Width: 17.11 inches (435mm)
- Depth: 18.32 inches (465mm)
- Weight w/drives: 58 pounds (26 kg)

For hard drive capacity measurements, 1GB = 1 billion bytes; actual formatted capacity less by 5% base on OS. Weight varies by configuration and manufacturing process.

Product specifications are subject to change without notice.

GVS90004XU Pro VTR designed and manufactured in the U.S. by GVS-Grande Vitesse Systems Inc.

GVS Authorized Partner:

GVS, Inc. (Headquarters)
390 Fremont Street
San Francisco, CA 94105
ph: 415-777-0320 • fax: 415-777-9544
sales: 800-794-4622 www.gvs9000.com

Product specifications are subject to change without notice.

GRANDE VITESSE SYSTEMS