

EP-10600 Series Workstations

Extreme Performance Digital Workstations

For Today's Demand of Massive Digital Imaging Processing



GGS Workstations
Power to map the world

A workstation built specially for photogrammetry and remote sensing applications

The **EP-10600** is the latest generation of GGS's ultra high performance workstations optimized for the handling of large amounts of digital images typical of airborne or space-borne digital imaging sensors.

Custom built to customer specifications with **Supermicro®** mission critical components and state-of-the-art technology, the EP series brings top graphics performance for 2D, 3D and Stereo applications thanks to the high end graphics cards used in all our configurations.

The **EP-10600** systems can hold an impressive amount of local storage in a RAID of high capacity SAS or SATA disk drives. All contained in a compact, whisper quiet, elegant, and heavy duty enterprise level tower chassis.

Main Features

- State-of-the-Art intel Xeon v3/v4 CPUs
- Two built in RAID controllers (0,1,5,10)
- Up to 8 x 6TB SAS/SATA drives on line!
- 56 Gbps Infiniband networking (optional)
- High end NVidia Stereo graphic controller
- Optional drive bays for data exchange
- 1 Year Warranty
- Redundant power supply (optional)

Motherboard

Processor/Cache

CPU	Intel® Xeon® processor E5-2600 v3/4 family† Dual Socket R3 LGA 2011 (160W max)
Cores / Cache	Up to 22 Cores / Up to 55MB Cache
System Bus	QPI up to 9.6 GT/s

System Memory

Memory Capacity	16x 288-pin DDR4 DIMM slots Up to 2TB DDR4 ECC 3DS LRDIMM Up to 1TB DDR4 ECC RDIMM
Memory Type	2400/2133/1866/1600MHz ECC DDR4 SDRAM 72-bit
DIMM Sizes	RDIMM: 32GB, 16GB, 8GB, 4GB LRDIMM: 64GB, 32GB. 3DS LRDIMM: 128GB
Error Detection	Corrects single-bit errors

On-Board Devices

Chipset	Intel® C612 chipset
AHCI SATA	SATA 3 (6Gbps) with RAID 0, 1, 5, 10
SCU SATA	SATA 3 (6Gbps) with RAID 0, 1, 5, 10
Network Controllers	Dual Intel® i210 Gigabit Ethernet Ports Supports 10Base-T, 100BASE-TX, and 1000BASE-T, RJ45 output
Audio	RealTek ALC888 7.1 High Definition Audio with S/PDIF header

Input / Output

SATA	10x SATA 3.0 ports (6Gbps)
LAN	2 RJ45 Gigabit Ethernet LAN ports
USB	6 USB 3 ports (4 rear + 2 via header) 5 USB 2 ports (2 rear + 2 via header, 1 type A)
Audio	7.1 HD Audio with optical S/PDIF
DOM	2x SuperDOM (Disk on Module) ports
TPM	1 TPM 1.2 20-pin Header

Expansion Slots

PCI-Express	3x PCI-E 3.0 x16 slots 2x PCI-E 3.0 x8 slots 1x PCI-E 2.0 x4 (in x8 slot) (Both CPUs need to be installed for full access to PCI-E slots and onboard controllers)
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System BIOS

BIOS Type	128Mb SPI Flash EEPROM with AMI BIOS Plug and Play (PnP), APM 1.2, DMI 2.3 PCI 2.3,
BIOS Features	ACPI 1.0 / 2.0 / 3.0 / 4.0 USB Keyboard support SMBIOS 2.7.1 UEFI 2.3.1

Management

Software	SuperDoctor® 5, Watch Dog, NMI
Power Configurations	ACPI Power Management Power-on mode for AC power recovery

PC Health Monitoring

Voltage	Monitors for CPU Cores, +1.8V, +3.3V, +5V, +12V, +3.3V Standby, +5V Standby, VBAT, Memory Voltages 6 Phase-switching voltage regulator 8x 4-pin fan headers (up to 8 fans)
FAN	8x fans with tachometer monitoring Status monitor for speed control Pulse Width Modulated (PWM) fan connectors Monitoring for CPU and chassis environment
Temperature	CPU thermal trip support Thermal Control for 8x Fan Connectors Thermal Monitor 2 (TM2) support PECI
LED	CPU / System Overheat LED Suspend static indicator LED UID/Remote UID

Other Features

Chassis intrusion detection
Chassis intrusion header
SDDC Support
RoHS

Operating Environment

Operating Temperature Range	10°C - 35°C (50°F - 95°F)
Non-Operating Temperature Range	-40°C - 70°C (-40°F - 158°F)
Operating Relative Humidity Range	8% - 90% (non-condensing)
Non-Operating Relative Humidity Range	5% - 95% (non-condensing)

Chassis specifications

Tower chassis with support for motherboard size of 12" x 13" E-ATX

Dimensions

Width	7.0" (178mm)
Height	17.8" (452mm)
Depth	25.5" (648mm)
Gross Weight	56 lbs (25.4kg)
Color	Black

Expansion Slots

7x Full-height, Full-length PCI expansion slots

Drive Bays

Hot-swap	8x 3.5" SAS / SATA Hot-swap Drive Bays SAS or enterprise SATA HDD used only
Peripheral Bay(s)	23 5.25" Peripheral Drive Bay Drive Bays are 90° Rotatable
Backplane	SAS / SATA Hard Drive Backplane w/AMI MG9072

Front Panel

Buttons	Power On/Off button System Reset button
LEDs	Power LED Hard drive activity LED 2x Network activity LEDs System Overheat LED Power Fail LED
Ports	2x USB 3.0 Ports (top)

System Cooling (Super Quiet configuration)

Fans	2x 80mm Super Quiet PWM Chassis Fans 1x 92mm Super Quiet Rear Fan
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System Monitoring

Chassis intrusion switch

Operating Environment (System)

Operating Temperature Range	5°C ~ 35°C (41°F ~ 95°F)
Non-Operating Temperature Range	-40°C ~ 60°C (-40°F ~ 140°F)
Operating Relative Humidity Range	8% ~ 90% (non-condensing)
Non-Operating Relative Humidity Range	5% - 95% (non-condensing)

Power Supply (Dual redundant power supply optional)

1200W high-efficiency power supply w/ PMBus

AC Input	1000W: 100-114.9 V, 50-60 Hz, 12 Amp 1200W: 114.9-240 V, 50-60 Hz, 12-8 Amp
DC Output	+3.3V / +5V / +12V / -12V / +5VSB
1000W max	20A / 20A / 83A / 0.3A / 3A

1200W max

20A / 20A / 99A / 0.3A / 3A

Certification
(Redundant PS
version)

Gold Certified 

Certification
(single PS version)

Platinum Certified 

Regulatory (Power Supply)

Power Supply Safety / EMC	USA - UL listed, FCC Canada - CUL listed Germany - TUV Certified Europe/CE Mark EN 60950/IEC 60950-Compliant CB report ready
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Options and Accessories

- Single or dual LCD monitors
- Stereo monitors
- NVidia Stereo Vision Kit 2
- GGS Softmouse 3D photogrammetric controller
- Removable drives for data courier with field crew
- We specialize in building systems with the exact configuration according to the user specifications.

About Global Geo Supplies

Founded in 2001, Global Geo Supplies, incorporated in the state of Colorado, USA, holds a long experience in the field of systems integration for high end photogrammetric and scientific workstations.

Since 2009 Global Geo Supplies is also the manufacturer and worldwide distributor of Softmouse 3D, the most widely used photogrammetric controller, supported by all major brands of photogrammetry applications.

For more information, visit: www.softmouse3D.com, contact us at Sales@ggsnet.com or call us at +1 303 792 5157,



Stereo monitors



Nvidia Stereo Vision Kit 2



GGS Softmouse 3D - USB



Portable workstations for field crews



Data exchange drives with carrying case