

MaxVision's X Class comparison matrix shows a sample of configurations and choices available. Our website (www.maxvision.com) provides the latest up-to-date configuration options.

In general terms, the user has a selection of several different disk storage, memory, graphics and display options.

The MaxPac®8230XRA family gives users up to 4 removable drives allowing up to 4TB of removable storage, the latest 1366MHz FSB and PCI Express graphics. This will be of greatest interest to graphics intensive applications such as simulation and geospatial intelligence.

The MaxPac®8230XRA family supports two PCI (with double wide graphics options, only one is available), two PCI-X and two PCIe x16 slots which allow full performance full span Open GL over all three display in the XRA3 model. Typically, one if the two PCI-X slots is used for the RAID controller leaving one PCI-X slot for a user card. For single or dual display configurations, the second PCIe slot is available for additional I/O cards such as a higher performance RAID controller which can free both PCI-X slots for user cards).

Triple display configurations in the MaxPac®8230XRA3 use the first PCIe graphics card for the center and right display and the second PCIe graphics card for the left display and external projector port. Typically, the nVidia Quadro FX4600 or FX3700 is used in the first graphics slot and an equal or lesser card such as the FX1700 is used in the second graphics slot. Full span Open GL performance is achievable over the all displays.

New products are constantly under development at MaxVision. In fact, 50% of all shipments are custom designed for particular demands of specific commercial and military intelligence customers.

By starting with a standard product which is close to meeting your needs, MaxVision can incrementally redesign appropriate segments of the product to precisely meet the particular demands of nearly any requirement.

You will find our technical support at a level above the industry, ensuring your MaxPac will continue to perform for you long after your initial purchase.

Call MaxVision today. We are the application-specific computer engineering and manufacturing company focused on high-performance workstation and server users needing deployable assets.

	MaxPac®8230XRA1	MaxPac®8230XRA2	MaxPac®8230XRA3
	Single Display	Dual Display	Triple Display
Processor/Motherboard	Dual processor dual core Xeon5100/5300 Up to 3.0GHz or dual processor quad core Xeon 5400 Up to 3.0GHz 1366MHz FSB, SuperMicro X7DAL-E+ motherboard with 5000X chipset		
Memory	Up to 24GB of DDR2 FB ECC memory, six memory SIMMs		
LCD Display Size	Single 20.1" 1600 x 1200	Dual 20.1" 1600 x 1200	Triple 20.1" 1600 x 1200
LCD Monitor Specifications	250nits min luminance, 178°/178° viewing angle, 16ms switching speed, contrast ratio 500:1, 16.7M colors with 72% color saturation with DVI-D iinterface. resolutions supported: 1600 x 1200, 1280 x 1024, 1152 x 900, 1024 x 768, 800 x 600. Dual and triple display configurations support second VGA input and PIP support.		
Video Controller Options	Choice of nVidia FX1700 occupies PCIe x16, FX3700, FX4600, occupies PCIe x16 slot + PCI slot	Choice of nVidia FX1700 occupies PCIe x16, FX3700, FX4600, occupies PCIe x16 slot + PCI slot	Choice of nVidia two FX3700 or FX4600 + FX1700. Two cards required to support 3 displays.
Std I/O Interfaces	1Gbit Ethernet, (4) external USB2.0 ports and two internal USB2.0 ports, Com RS-232, audio, mic, line in, line out, PS2 keyboard and mouse ports		
PCI Expansion slots	2 PCI 32bit-33Mhz, 2 PCI-X 133MHz, 1 PCIe x16 (x4 signal)		2 PCI-X 133MHz, 1 PCI slots
Removable Hard Drive Magazine	HDPac4™ magazine allows removal of all HD without tools in <10Sec. Individual drives replacable without removing other HD. All drives hot plug.		
Hard Drive	Choice of 4 SATA hard drives, 320GB@7200, 400GB@7200rpm, 500GB@7200rpm and 750GB@7200rpm		
Hard Drive Interfaces	4 SATA 300 ports on motherboard for JBOD interface, 4 Port SATA RAID controller requires 1 PCI-X slot or one PCIe slot		
Video Projector Ports	Second video port	none	2nd port on 2nd video card
	Optional DVI port splitter provides support of two DVI projectors		
Power Supply	650Watt 90-264VAC 50/60Hz 115VAC@400Hz with optional integrated UPS	650Watt 90-264VAC 50/60Hz 115VAC@400Hz with optional integrated UPS	650Watt 90-264VAC 50/60Hz 115VAC@400Hz with optional integrated UPS
Software OS	Windows XP SP2, Windows XP 64bit, Windows 2003 Server, Windows 2003 Ent. Linux - Redhat 9.0, Redhat AS 3.0, SuSE 9.0, Solaris 10 with Adaptec RAID	Windows XP SP2, Windows XP 64bit, Windows 2003 Server, Windows 2003 Ent.	Windows XP SP2, Windows XP 64bit, Windows 2003 Server, Windows 2003 Ent.
Size Closed	19"W x 16"H x 7.2"D	19"W x 16"H x 9.2"D	19"W x 16"H x 10.8"D
Size Setup (displays unfolded)	19"W x 16"H x 7.2"D	35"W x 16"H x 9"D	51.5"W x 16"H x 9"D
Environmental	0-50°C operating 10-90% relative humidity non-condensing, exceeds Mil Std 810F Hot Operating Temperature cycle test, -20 to 70°C non operating	0-50°C operating 10-90% relative humidity non-condensing, exceeds Mil Std 810F Hot Operating Temperature cycle test, -20 to 70°C non operating	0-50°C operating 10-90% relative humidity non-condensing, exceeds Mil Std 810F Hot Operating Temperature cycle test, -20 to 70°C non operating
Regulation	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE
Transit Case	Custom Pelican® 1620 water-tight roller case stores Keyboard, mouse and cords	Custom Pelican® 1620 water-tight roller case stores keyboard, mouse and cords Meets Mil Std 810F vibration	Custom Pelican® 1620 water-tight roller case stores keyboard, mouse and cords Meets Mil Std 810F vibration
Weight	38 lbs. without HD magazine or accessory roller pack - 44lbs with HD magazine 54 lbs. with accessory roller pack	53 lbs. without hard drive magazine 59 lbs. max with hard drive,	64 lbs. without hard drive magazine 71 lbs. max with hard drive,
Total Weight of Computer with UPS and Transit Case	75 lbs. accessory roller case and HD magazine 68 lbs. without HD magazine (ADD 5 lbs. for UPS option)	86 lbs. with hard drive magazine 79 lbs. without HD magazine (ADD 5 lbs. for UPS option)	94 lbs. with hard drive magazine 87 lbs. without HD magazine (ADD 5 lbs. for UPS option)

MaxPac® X Class Workstations: Geospatial PowerStation

MaxVision's MaxPac® X Class represents the most powerful and the most deployable rugged portable computer workstation on the market. MaxPac® X Class is quickly setting the new standard for deployable hardware for use in geospatial intelligence, command and control, UAV imagery processing, data acquisition, video editing, simulation, mission briefing and mission rehearsal.

Unlike any other portable on the market, MaxPac® X Class is designed **COTS TOUGH** from the inside out. MaxVision understands that there is far more to computer ruggedization than pretending to shock mount a hard drive. Our studies and experience show that the hard drive is not the first thing to fail in a damaging drop. MaxVision's patent pending Box-in-Box™ design uses a custom Poron® cradle which completely "floats" the inner chassis and

MaxPac®8230XRA1
Single Display



MaxPac®8230XRA3
Triple Display

motherboard, hard drives, video cards, DVD and power supply, is protected by a smart foam cushion which actually resists more on higher velocity impacts. When shipped as freight, an additional Pelican® roller case provides water-tight protection with additional polyethylene foam suspension.

MaxVision has advanced the power supply to accept all known AC sources of power 90 - 264VAC at 47Hz to 400Hz

which includes avionic power (found onboard military and commercial aircraft). Additional protection is provided by an optional integrated UPS power supply with internal sealed batteries which protect against brownouts and short power outages of for over 10 minutes. A special configuration can be provided to operate on 28VDC should that be required while still preserving the UPS function. The entire UPS function and battery adds less than 5 pounds to the total unit and fit entirely inside the MaxPac®8230XRA family of workstations.

all computer components inside the outer case. In a sense, the outer aluminum case is a light transit case which takes the beatings of drops and tip overs while the inner chassis and its contents get the softer ride. The inner chassis, including the processors and their heat sinks,



MaxPac®8230XRA2
Dual Display

...designed **COTS TOUGH** from the inside out.

MaxPac® X Class Workstations

MaxVision's MaxPac® X Class represents the latest in rugged portable computer workstations. Its design includes the latest high-performance Xeon processors, disk, and graphics technology packaged in a patent pending Box-in-Box™ shock isolation system.

The MaxPac® X Class offers a choice of one, two or three 20.1" 1600 x 1200 LCD displays. A total of six 9" option slots support graphics: Two PCIe x16, 1 PCI (2 PCI slot with single slot FX1700 or FX3700 graphics), 2 PCI-X.

The MaxPac®8230XRA family boasts the latest motherboard technology featuring dual Xeon 5100/5300 and quad Xeon 5400 64 bit processors running at 1366MHz FSB. Up to 6 memory DIMM sockets support up to 12GB standard (24GB upon special request) of ECC fully buffered memory for use with 64 bit Linux and Windows XP64 operating systems.

The MaxPac®8230XRA family features a **HDPac4™**, four hard drive removable data magazine allowing up to 4 Terabytes of storage. The entire hard drive array can be removed in seconds without tools. Individual SATA drives can be exchanged for hot swap replacements of failed drives without removing the entire magazine or shutting down the system. A high performance RAID 5 controller is typically provided.

Although MaxPac® packaging is anything but standard, most components used in MaxPac® X Class computers are off-the-shelf components. Motherboard, processors, memory, hard drives and video cards are selected from the best-of-class off-the-shelf components. Once inside the inner chassis of the MaxPac® X Class, the user is totally at ease. All components are easily accessible and serviceable with minimum training.



Selected configurations of MaxPac®8230XRA workstations are certified to operate from 0°C - 50°C and meet **Mil Std 810F HOT** operation while operating at full performance. These MaxPacs® will function even when people cannot stand the heat.

The 'Desert Proven' Filter technology traps nearly all small particle dust, such as that found in the Iraqi desert. The filter eliminates frequent filter changes. The lifetime filter is velcro attached and can be washed and recharged for reuse.



Multi-display MaxPacs® use friction hinges and latches to hold securely.

Dual LCD MaxPac® with the right display set at any angle, typically 0-20 degrees.



Designed for service access, the X Class displays hinge open to access the inner chassis



MaxVision removable 4-hard drive **HDPac4™** provides up to 4TB of RAID-0, RAID-5 or JBOD



MaxPac®8230XRA1 is perfectly balanced, allowing any tilt angle between 0 and 15 degrees with the touch of a finger.



Choice of double layer 8.5GB DVD burner or 50GB Blu-ray burner.



All MaxPac® X Class come standard with water-tight Pelican® roller cases for transit and freight protection.

MaxVision has designed the transit case to minimize both vibration and shock allowing it to be dropped from 18" without damage while, at the same time, meeting most **Mil Standard 810F** vibration profiles for both wheeled vehicles and helicopters such as the Blackhawk.

