

## MaxPac<sup>®</sup> XL Class Model Matrix



### So Advanced it's Simple

The MaxPac<sup>®</sup>8230XL can be opened for service in less than one minute and serviced by anyone with basic familiarity with PC server components. MaxVision's extensive service manual and training is backed up with expert support at MaxVision. MaxPac<sup>®</sup>s can be serviced by the user, third party support technicians or it can be returned to MaxVision from anywhere Fed Ex or DHL delivers.



The MaxPac<sup>®</sup>8230XL has a full-featured I/O and several expansion slots.

	MaxPac <sup>®</sup> 8230XL1 Single Display
<b>Processor</b>	Dual Xeon 5100/5300 dual core or 5400 dual quad core
<b>Memory</b>	Up to 24GB of DDR2 ECC memory, six memory SIMMs
<b>LCD Display Size</b>	23" 1920 x 1200 LCD
<b>LCD Monitor Specifications</b>	250nits min luminance, 170°/170° viewing angle, 8ms switching speed, contrast ratio 800:1, 16.7M colors with 72% color saturation with DVI-D interface. 1920 X 1200, single or dual (over and under) display configurations.
<b>Video Controller Options</b>	Choice of nVidia FX1700, FX3700, FX4600 and FX4600SDI, occupies PCIe x16 slot
<b>Std I/O Interfaces</b>	(2)Gbit Ethernet RJ-45, (4)USB2.0, (1)Com RS-232, audio, mic, line in, line out, PS2 keyboard and mouse ports, (4) SATA controller ports for non-RAID drives.
<b>Raid Controller</b>	PCIe 3ware <sup>®</sup> 9650SE-8LPML, RAID controller. Supports high performance RAID. Optional 16 channel raid supports <b>TeraPac<sup>®</sup>3</b> HD expansion chassis.
<b>PCI Expansion slots available</b>	1 PCI 32bit-33Mhz (second slot available if single slot graphics is used), 2 PCI-X 133MHz
<b>Removable Hard Drive Magazine</b>	<b>HDPac<sup>™</sup>8</b> magazine allows removal of all HD without tools in <10Sec. Optionally any combination of 2 and 4 <b>HDPac<sup>™</sup></b> magazines can be used. Individual drives replacable without removing other HD. All drives hot plug.
<b>Hard Drive</b>	Choice of 9 SATA hard drives, 160GB, 320GB, 500GB, 750GB and 1TB 7200rpm SATA removable HD
<b>Power Supply</b>	650Watt 90-264VAC 50/60Hz 115VAC@400Hz
<b>Software OS</b>	Windows XP SP2, Windows XP 64bit, Windows 2003 Server, Windows 2003 Ent.Linux - Redhat 9.0, Redhat AS 3.0, SuSE 9.0
<b>Size Closed</b>	26"W x 16.5"H x 12"D
<b>Size Setup (displays unfolded)</b>	26"W x 16.5"H x 10"D
<b>Environmental</b>	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
<b>Regulation</b>	FCC Class A, CE
<b>Transit Case</b>	Custom Pelican <sup>®</sup> 1630 water-tight roller case stores keyboard, mouse and cords
<b>Weight</b>	100 lbs. (without drives), secondary Pelican <sup>®</sup> with hard drives weighs 20 lbs.
<b>Total Weight of Computer without UPS and Transit Case</b>	75 lbs.

## MaxPac<sup>®</sup> XL Class: Deployable Super Workstation

The MaxPac<sup>®</sup>8230XL is an extreme rugged portable computer workstation. It features the latest dual processor quad core Xeon processors, up to 24GB of DDR2 ECC memory, 9 removable 3.5" hard drives supporting up to 9TB of storage and one 23" 1920 x 1200 adjustable LCD display. Advanced air filtration, extreme Box-In-Box<sup>™</sup> shock isolation systems and the ability to withstand 0 - 50°C operating temperatures make this the toughest extreme portable server workstation on the market.

The MaxPac<sup>®</sup>8230XL was designed to meet to needs of a wide variety of extreme applications.



MaxPac<sup>®</sup>8230XL1

- The HD video professional will be able to capture un-compressed HD video directly to a removable **HDPac<sup>™</sup>** at rates of 500MB/Sec. and then preview and edit uncompressed HD directly in the field.
- Geospatial Analysis can rely on the MaxPac<sup>®</sup>8230XL as either a stand alone workstation or as a central server sharing up to 8TB of data with MaxPac<sup>®</sup> X Class triple screen workstations.
- Military Command and Control applications can confidently deploy with the most rugged deployable server/workstation on the market.
- Extreme data acquisition applications can take full advantage of the 6 full length slots (one PCIe x16 for the video card and one PCIe for RAID controller) leaving two PCI-X and two PCI slots. The flexible removable **HDPac<sup>™</sup>** system allows the use of a single 8 drive **HDPac8<sup>™</sup>** or two **HDPac4<sup>™</sup>** or four **HDPac2<sup>™</sup>** magazines in any combination totalling 8 drives.



MaxPac<sup>®</sup>8230XL2

### Advanced CPU and Memory

The Dual Xeon dual or quad Core CPUs allow a full performance 8 CPU core system. The DDR2 ECC memory system supports 12GB with cost effective 2GB DDR2 DIMMS or 24GB using 4GB DIMMS.

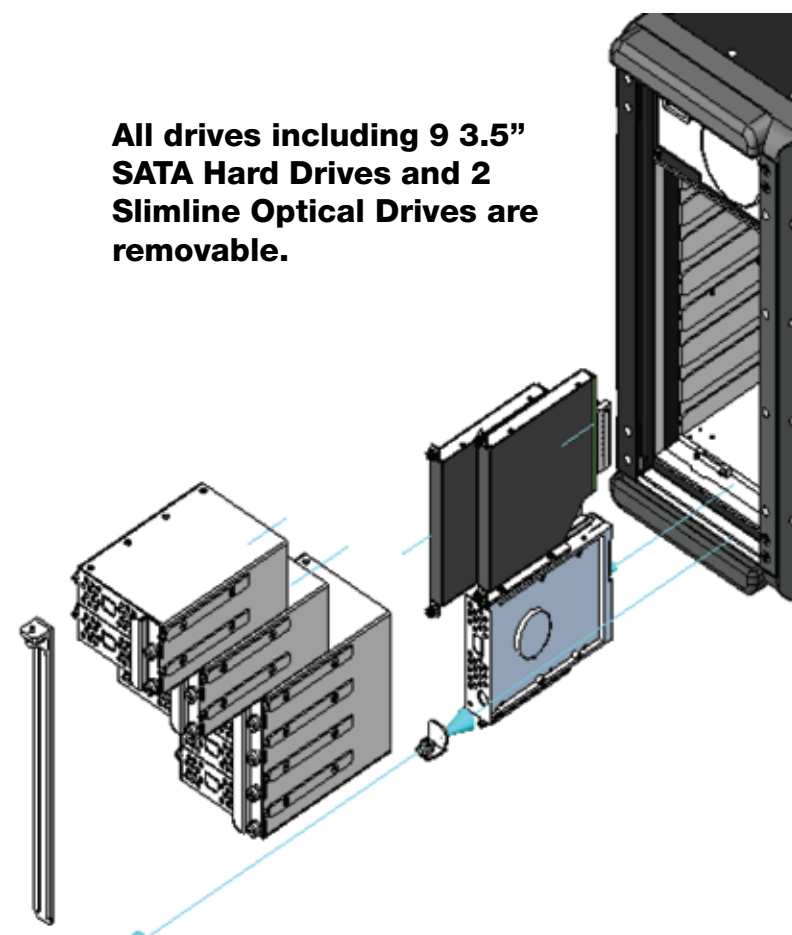
### Advanced Motherboard Selection

MaxVision has selected the most advanced motherboards available allowing a wealth of standard features and a rich set of PCI slots for video cards, raid controllers and the user's own PCI-X and PCIe cards. The Supermicro X7DAL-E+ board provides two Gbit Ethernet, four USB, COM port and a complete audio on the motherboard. 4 SATA Ports can be used for non-raid drives and the PATA connector is used to support two optical DVD-R double layer or Blu-ray burners. Advanced PCI option slots provide two PCIe x16 slots (one is used for the video card and the other for the Raid controller) and two PCI-X. A single PCI 32 bit slot is adjacent to the video card. A second PCI slot is available if a single slot video card is used (such as FX3700 or FX1700)

## MaxPac® XL Class

### Advanced Removable Hard Drive HDPac™

The MaxPac HDPac™ system featured in the MaxPac®8230XL provides a single backplane that can hold 8 3.5" SATA hard drives. These drives can be organized into HDPac™ of 2, 4, or 8 hard drives. An independent 9th system drive plugs into a separate single backplane. All drives are hot pluggable. HDPacs™ configured as Raid modules can have failed drives in the HDPacs™ replaced without removing the HDPacs™ or powering down the system. Any number of HDPacs™ totaling 8 drives can be installed into the backplane. HDPacs™ can be removed without tools and in less than 15 seconds. HDPacs™ can travel in custom designed small transit cases or inside the MaxPac®. Because the hard drives are the weak link to operating at extreme temperatures, MaxVision feeds fresh filtered air to the hard drives before directing it to other more heat tolerant components. This allows operation of the MaxPac®8230XL at 50°C without violating the hard drive temperature specifications.



**All drives including 9 3.5" SATA Hard Drives and 2 Slimline Optical Drives are removable.**



### Advanced Shock Isolation System

MaxVision understands the kinetic energy in play when equipment is dropped. Our unique Box-In-Box™ shock isolation system protects the complete inner chassis of the computer by floating it in a 2cm Poron® polyurethane cradle separating it from the outer case. This smart isolation system resist more on higher energy drops from higher distances. When the MaxPac®8230XL is in its transit case, all computer components, including the displays are protected from drops and tumbles of up to 24".

**Custom air/water tight Pelican transit case.**



**'Desert Proven' Filters**



### 'Desert Proven' Filter System

MaxPac® computers deployed in the Middle East have experienced fine dust and dirt contamination not seen in other parts of the world. MaxVision has adapted the most advanced engine filter technology for use in MaxVision MaxPac® computers. The filters are lifetime use and can be washed in soap and water and recharged for its next use. No special tools are required to change the filter and you do not have to shut down the MaxPac® to clean or replace the filter media. The filter media has many times the surface area of ordinary filters and has demonstrated to have little or no back pressure even after extended use. You are not required to do frequent cleanings even in heavy use Middle East environments. Less demanding environments require cleaning only every year or two, if ever. A common component failure in dirty environment is the optical drive. In the MaxPac®8230XL, all optical filters are behind the filter system. Optical drive components will not be contaminated by dust. The filter can be removed for a few seconds while the disc is inserted and then reinstalled without any tools in seconds. In the MaxPac®8230XL, there are actually two optical drives and they are both pluggable so replacement does not require opening the computer.

### Advanced Cooling Design

MaxVision has taken thermal design to the next level with the MaxPac®. Not only is all intake air filtered, but the hard drives, CPU and video cards are carefully configured and tested to stay within their operating limit even when operating at 50°C. This reduces the maximum heat each subsystem has to endure, thus allowing robust continuous operation well beyond the most aggressive operational test specified in the Mil Std 810F HOT operation. Only air cooling is used. Where needed, heat pipes are used to move thermal energy without the use of heavy copper heat sinks keeping the weight overhead of cooling to a minimum.



**MaxPac®8230XL1 with protective cover.**