

# Raptor 4000-LR Raptor 4000e-LR

The Raptor 4000-LR and 4000e-LR graphics boards were entirely designed in-house specifically for ATC tower, military, vessel traffic control and other command and control applications. They offer highly configurable multi-mode standard resolutions where  $2K \times 2K$  displays are not required.

- 128 MB frame buffer
- Multi-mode resolution support and layering via 8+8, 8 bit, 24 bit, 8+24 & MOX Modes
- DVI-D (digital) and DVI-I (digital/analog) outputs
- PCI/PCI-X (Raptor 4000-LR) and PCI Express (Raptor 4000e-LR) short form boards
- Comprehensive customer care including long-term technical support
- Support for Linux, Solaris x86 and HP-UX



## Multi-Monitor and Multi Resolution Support

The Raptor 4000-LR and 4000e-LR support up to two monitors with two DVI outputs. Both heads support digital monitors and the outer head also drives analog monitors. The maximum resolution is  $1920 \times 1200$  on either head. The cards support DDC/EDID and either head automatically configures to the native resolution of DDC compatible monitors. Resolutions can also be set through simple software configuration changes. The drivers are easy to install and the product is readily adapted to your changing needs.

## Maximum Performance and Flexibility

With 128 MB of on-board memory and an efficient memory manager, the boards offer excellent drawing performance and optimal pixmap management with minimum host CPU usage. These products offer maximum flexibility supporting more video modes than any other graphics boards currently on the market. Layering is available through several methods including an 8+8 video mode and MOX (Multiple Overlay eXtension) modes. In addition, traditional video modes such as 8 bit, 24 bit and 8+24 are available and selection is easily achieved through software configuration.

### Passive Heatsink Cooling System

Graphics board GPUs must be sufficiently cooled at all times not only to ensure optimum performance, but more importantly, to protect them from failure. To meet these demands, the Raptor 4000-LR and 4000e-LR employ an innovative passive heatsink (i.e. no fan). This increases reliability while eliminating downtime and expense required for fan inspections.

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# **Backward Compatibility**

The Raptor 4000-LR and 4000e-LR offer backward compatibility with their predecessors such as the Raptor 1100T and Raptor 1000. This allows customers to seamlessly upgrade their graphics boards and maintain the same functionality without having to modify applications.

## Wide-Ranging Driver Support

The drivers for these graphics boards were developed in-house, have been extensively field tested, and are easily installed on Linux and UNIX platforms. Because they are loadable, the drivers can be used with graphics boards from other vendors in a multi-screen environment.

#### Longest Product Life in Their Class

While most vendors' products are only available for one or two years, EIZO guarantees availability for at least five years, and support for at least ten years. For system integrators, OEMs and ATC centers, this means significant savings on development costs by reducing the frequency of configuration re-testing that is necessary when replacing old cards with new ones.

#### **About EIZO**

EIZO manufactures a complete lineup of visual display and recording solutions for ATC environments. The company's products include primary control monitors, high-bright monitors, auxiliary and touch-screen monitors, graphics boards, and hardware/ software recording solutions. EIZO is based in Japan and has R&D facilities in the U.S. and Germany. It is listed on the first section of the Tokyo Stock Exchange (TSE: 6737) and represented in more than 60 countries around the world.

# **Specifications**

	Raptor 4000-LR	Raptor 4000e-LR
Frame Buffer Size	128 MB	
MOX Hardware	EIZO MOX Functionality; 32 layer management	
Color Lookup Table	2048 entries from a palette of 16.7 million colors + 2 AUX 256	
Graphics Modes	8 bit, 24 bit, 8+8, 8+24, MOX 16, MOX 24, MOX 32 (software configurable)	
Dynamic Color Plane Groups	32	
Interface	33/66 MHz 32/64-bit Revision 2.2	PCI Express 1x, Compliant with PCI Express Base Spec
Video Connectors	DVI-D × 1, DVI-I × 1	
Maximum Supported Resolutions	Digital: 1920 × 1200 Analog: 1920 × 1200 for second connector only	
Temperature Rating	Operating: 10° C to 50° C / 50° F to 122° F Non-operating: -10° C to 70° C / 14° F to 158° F	
<b>Humidity Rating</b>	10% to 90% (non-condensing)	
Power Rating	Less than 25 watts	
Dimensions (L × W)	174.6 mm × 106.7 mm 6.9" × 4.2"	167.7 mm × 111 mm 6.6" × 4.37"
Software Environments Supported*	Solaris x86 HP-UX Linux Red Hat	

<sup>\*</sup>Please contact us for additional information.

