



# The Imaging Experts

## RAD4C-KM™ Graphics Head

### A low cost graphics head alternative for SGI Systems

#### **Description**

The PsiTech RAD4C-KM is a software based graphics head which comes complete with PsiTech Graphics Server and PsiTech PCI drivers for applications on the SGI O2<sup>TM</sup>, Octane<sup>TM</sup>, Origin 200<sup>TM</sup>, and Origin 2000<sup>TM</sup> host systems.

The RAD4C-KM 8MB frame buffer with the 200MHz RAMDAC provides a wide range of display options including VGA, SVGA, XGA, 17", 20", or 24" in either landscape or portrait formats and a full range of display visuals from gray scale to full double buffered 24 bit color with overlays.

The PsiTech Graphics Server is protocol compatible with both the Open Group X Window System<sup>TM</sup> and the SGI OpenGL<sup>®</sup> technologies.

The PsiTech PCI Drivers are compatible with SGI's IRIX 6.3, 6.4 and 6.5 operating systems. These drivers minimize system impact by utilizing optimized DMA routines.

#### **Benefits**

For Desktop systems, the RAD4C-KM provides low cost additional display space that not only increases the display surface but also results in better visual separation between user control and graphic output. The additional head frees up the SGI native accelerated head for the graphics intensive operations and results in better utilization of system resources.

For File servers, the RAD4C-KM provides a low cost integrated systems console and graphics head alternative to ASCII or network attached X terminals. System administration is more convenient with the graphical based system administration tools. In addition to the console advantages, the RAD4C-KM opens up the file server to those new applications that benefit from having special low to high-resolution ranges with single or multiple graphic head requirements.

#### **Applications**

The RAD4 supports a wide variety of applications in Command and Control, Training and Simulation, Weather,

Architecture Engineering and Construction (AEC), Geographic Information Systems (GIS), Computer Aided Design Manufacturing and Engineering (CAD/CAM/CAE), medical, high-resolution defense and medical imaging, and air traffic control markets.

#### **Configurations**

The RAD4C-KM may be used as the primary, or secondary graphics head or combined together for use as multible graphics heads. Each graphics head requires a RAD4C-KM, monitor, keyboard/mouse, and a system PCI slot. The CD-ROM included with the RAD4C-KM contains all of the software options for the supported hosts.

On the SGI O2 and Octane, an additional head is provided with a single RAD4C-KM as a second graphic server with both X and OpenGL functionality.

On the SGI Origin200 and Origin2000 file servers, the RAD4C-KM provides primary, secondary, or multiple graphics heads. Additional graphic heads can be provided for multiple screens or multiple users.

#### **Ordering Information**

The RAD4C-KM contains:

PCI card
User's manual
CD-ROM
Software registration card

Monitor and keyboard/mouse not included.

Filling out and returning the Software registration card validates the hardware warranty and entitles the purchaser to one-year of software upgrades as available.

#### HARDWARE SPECIFICATIONS

#### SOFTWARE SPECIFICATIONS

General:

Card Size: Short Universal

Bus Interface: PCI 32
Power: 12 Watts
EMI: FCC Class A/B

Warranty: One-year hardware; parts and labor;

return to factory

Frame Buffer Memory:

Memory: 8MB VRAM Input: 64MB/Sec.

Video: programmable up to 200MHz

**Environmental (operating)**: Temperature: 0 to 50C

11 ... 1'4 ... 100/ 4 . 000/ ...

Humidity: 10% to 80% non-condensing

**Environmental (non-operating):** 

Temperature: -40 to 60C

Humidity: 10% to 95% non-condensing

Display:

Orientation: Landscape or Portrait

**Spatial Resolutions:** 

Programmable;

2048 x 1024; 1600 x 1200; 1280 x 1024; 1024 x 768; 800 x 600; 640 x 480

Pixel Size: 3 x 8 bits Overlay Size: 8 bits Vertical: programmable;

non-interlaced

Output Signals: R, G, B, Hsync, Vsync

Sync: Composite Sync on Green, HVsync,

Hsync and Vsync

Connector:

Video: HD-15 Keyboard/Mouse:

2 - 9 pin DIN PS/2 Compatible

Gamma Correction Tables:

3 x 256 x 10 bits

DAC Resolution: 3 x 10 bits

**PsiTech Graphics Server:** 

Protocol compatible with: X Window System (X11R6)

OpenGL

**PsiTech Merged Server:** 

Protocol compatible with: SGI X Window System

PsiTech PCI drivers:

Compatible with:

SGI IRIX 6.3 Operating System SGI IRIX 6.4 Operating System SGI IRIX 6.5 Operating System

**PsiTech Utilities:** 

Keyboard/mouse sharing routine

Set monitor utility

**PsiTech, Inc.** 18368 Bandilier Circle ☐ Fountain Valley, CA 92708 ☐ Phone: 800-872-7385 / 714-964-7818 Fax: 714-968-7884 ☐ info@psitech.com ☐ http://www.psitech.com/