

# The Ruggedized Acadia I™

## World-Leading Video Intelligence

Pyramid Vision Technology's Ruggedized Acadia I Vision Accelerator is the industry's most powerful stand-alone vision processing system. The recognized leader in processing and optimizing video intelligence, the Ruggedized Acadia I is specifically developed for applications that must withstand the forces of weather, mechanical stress, and various types of movement. Ruggedized Acadia I provides full-color, full-resolution, real-time video processing right at the video collection source, turning poor quality video into useful video information for military operations, surveillance, subject identification, and fire-fighting.



### RUGGEDIZED ACADIA I CAPABILITIES

The Ruggedized Acadia I is powered by Acadia I single-chip vision processing, and provides those functions critical to achieving high-quality video intelligence data:

- Real-time electronic stabilization of shaky video, caused by camera or subject movement during video acquisition
- Real-time construction of mosaics/panoramas
- Fusion of two video sources, including IR and visible

Ideal for outdoor usage in locations subject to harsh environmental conditions, temperature extremes, and situations where vibration occurs, Ruggedized Acadia I is the right solution for the video quality problems inherent in video obtained from cameras mounted on surveillance poles and moving platforms. Ruggedized Acadia I may also be confidently installed in aircraft and various types of ground vehicles.

Ruggedized Acadia I features include:

- Sealed, weatherproof enclosure
- Certified MIL standard 810 vibration and temperature testing
- Parameters are programmable from a PC workstation or laptop computer
- Passive cooling design
- Military connectors for high-reliability interconnect

### RUGGEDIZED ACADIA I APPLICATIONS

- ▲ Manned/Unmanned Aerial Vehicles
- ▲ Manned/Unmanned Ground Vehicles
- ▲ UAV/Other Ground Stations
- ▲ Surveillance Poles
- ▲ Moving Platforms
- ▲ Building Exteriors

### COMPLETE SOLUTION

- Ruggedized Acadia I is a self-contained vision system for harsh environments.
- Software for stabilization, mosaics, and fusion can be pre-installed.
- Pre-installed parameters can be changed using a PC workstation or laptop computer.

### REAL-TIME VISION SYSTEM

- Up to 80GOPS processing power
- 30 frames/sec full-resolution processing

### SPECIFICATIONS

- Size: 11" x 6½" x 3"
- Power: 10 - 36Vdc 15 W

### VIDEO I/O

- NTSC or PAL
- RS-170, Composite, S-Video, NTSC, PAL

### DIGITIZER

- Digitizes 2 channels simultaneously
- 720x480 pixels/frame at 30 frames/sec

### SYSTEM REQUIREMENTS

- IBM-compatible PC/laptop running Windows-2000

# Ruggedized Acadia I Software Applications

## STABILIZATION

- Stabilized live video
- 1/10th pixel stabilization
- 30 frames/sec output
- 2 frame latency
- 1/5th of FOV motion range
- Translation, rotation, zoom and shear stabilization

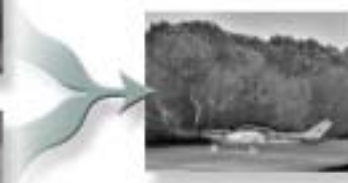


## MOSAICS/PANORAMAS

- Real-time panorama construction
- Accommodates all types of motion

## FUSION

- Affine alignment of inputs
- Pattern selective fusion
- 30 frames/sec output
- 2 frame latency
- IR and visible fusion



## FUTURE PRODUCTS

- Enhancements
- Motion tracking



## *Ordering information:*

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