

# 3600AS THERMAL-EYE



The Thermal-Eye 3600AS is our lightest and smallest, long wavelength infrared camera core

**SECURITY**

**MILITARY**

**PUBLIC SAFETY**



**THERMAL-EYE™**



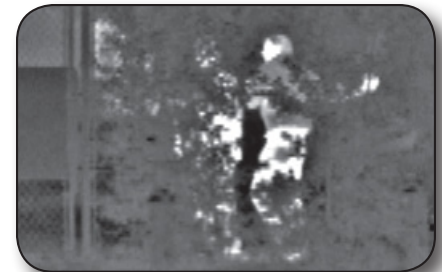
It uses proven Amorphous Silicon Microbolometer detector technology with 30µm 160 x 120 pixel array.

## **FEATURES:**

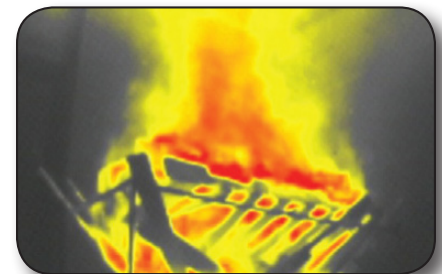
- Seal-ready packaging design
- Small size & best-in-class power consumption
- 30 micron detector
- Advanced image processing
- Customizable absolute color
- Worldwide video compatibility
- Sophisticated GUIs
- Open architecture
- Integration support

## **BENEFITS:**

- Seal-ready optics housing and optics assemblies for easy OEM integration
- Smaller CCA size (compared with 3500AS) for improved packaging flexibility & best-in-class <1.2W consumption
- Provides real-time 30Hz frame rate plus state-of-the-art thermal sensitivity and dynamic range
- Sophisticated histogram-based image processing and
- 640 x 480 video output resolution for best-in-class image quality at all times
- Patent pending non-linear colorization allows OEMs to define multiple color set points for quick, intuitive temperature recognition
- Selectable real-time NTSC or full-format PAL video output
- Flexible OEM customization
- Expansion port provides access to data along video processing chain for advanced OEMs\*
- Efficient and knowledgeable integration support available



Perimeter security



Fire scene with customizable absolute color



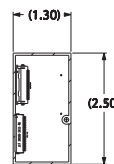
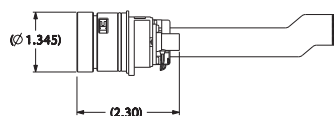
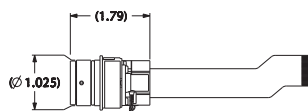
**Warrior Systems**

\*Contact L-3 and ask for Technical Support to see if you qualify as an advanced OEM



## 3600AS TECHNICAL SPECIFICATIONS:

FEATURES		THERMAL-EYE 3600AS	THERMAL-EYE 3620AS	THERMAL-EYE 3640AS
FOCAL PLANE ARRAY	MATERIAL, STRUCTURE & FORMAT	Amorphous Silicon Microbolometer (160 x 120 pixel array)		
	SPECTRAL RESPONSE	7-14µm (filter bandwidth)		
	THERMAL SENSITIVITY	<50mK		
	REFRESH RATE	Real-time 30Hz		
THERMAL IMAGING SYSTEM PERFORMANCE	START-UP TIME	2.4 seconds +/-10% (@25°C)		
	CONTRAST/BRIGHTNESS	Automatic/Advanced Image Processing		
	SATURATION TEMPERATURE	1100°F (600°C) +/-10% with automatic electronic iris		
	RANGE TO DETECT HUMAN ACTIVITY	Up to 330ft (100m)	11° FOV: up to 1500ft (475m) 17° FOV: up to 1000ft (305m) 32° FOV: up to 550ft (170m)	Up to 700ft (215m)
OPTICS	FOCAL LENGTH	5.8mm	25mm; 16mm; 8.5mm	11mm
	FIELD OF VIEW	~50° x 37°	~11° x 8°; ~17° x 12°; ~32° x 24°	~25° x 18°
	FOCUS METHOD	Manual/Temperature stabilized	Manual	Manual
VIDEO	ANALOG OUTPUT	NTSC (color): Real-time 30Hz Frame Rate; PAL (color): Real-time 25Hz Frame Rate		
	DIGITAL OUTPUT (OPTIONAL)	Full-resolution, 16-bits (corrected or uncorrected) or 24-bits (RGB color), plus control signals; 30Hz Frame Rate (NTSC) or 25Hz Frame Rate (PAL)		
	OUTPUT RESOLUTION	NTSC: 640 x 480 pixels for higher clarity thermal images & symbology overlay PAL: 768 x 574 pixels for higher clarity thermal images & symbology overlay		
	ABSOLUTE COLOR	3 OEM selectable color points are mapped to absolute temperatures		
POWER	INPUT VOLTAGE	2 to 3.2VDC & 8 to 16VDC		
	INPUT POWER	~1.2W @ 25°C ambient, 3VDC		
CONTROLS	CAMERA SETUP & COMMUNICATION	USB (compatible with the USB 2.0 specifications)		
PHYSICAL CHARACTERISTICS	SIZE	See diagram below		
	WEIGHT	2.38oz (67.5g) without optics		
	OEM "SEAL-READY" DESIGN*	No	Yes (11° FOV; 17° FOV) No (32° FOV)	No
ENVIRONMENTAL CHARACTERISTICS	OPERATING TEMPERATURE	-4°F to 185°F (-20°C to 85°C)		
	STORAGE TEMPERATURE	-40°F to 221°F (-40°C to 105°C)		
ORDERING INFORMATION	PART NUMBER	50° FOV: 7070030-0001	11° FOV: 7070040-0001 17° FOV: 7070040-0002 32° FOV: 7070040-0003	25° FOV: 7070035-0001
OPTIONAL ACCESSORIES	OEM DEVELOPERS KIT	4000024-0001		
	RS-232 SERIAL INTERFACE KIT	3000224-0001		
ADDITIONAL CAMERA FUNCTIONS	<ul style="list-style-type: none"> <li>- Expansion port with real-time digital video and usb 2.0 Compatible control interface (works with usb &amp; hi-speed usb systems, peripherals &amp; cables)</li> <li>- Customizable absolute temperature colorization</li> <li>- White-hot or black-hot polarity selectable</li> <li>- Electronic zoom for 2x to 5x and electronic iris</li> <li>- Selectable temperature indication of scene at central crosshair</li> <li>- Optional guis for customization and control (user parameters, symbology overlay, color, real-time control)</li> </ul>			
Specifications subject to change without notice		*Optics/Head is sealed to 3 meter submersion: IEC529, Ipx8		3600AS Rev.1 May 2012



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