4500AS$_{9HZ}$

THERMAL-EYE®

The Thermal-Eye 4500AS$_{9HZ}$ is our newest high-resolution infrared camera core. It uses proven Amorphous Silicon Microbolometer detector technology with 30µm 320 x 240 pixel array and a 9Hz video frame rate for improved exportability. It is fully compliant with the European Union's Restriction of Hazardous Substances (RoHS).

FIRE AND RESCUE

SECURITY

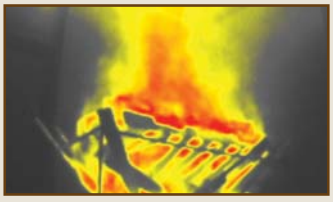
MILITARY

PUBLIC SAFETY

FEATURES:	BENEFITS:
HIGH RESOLUTION	Better target resolution and longer stand-off range
30 MICRON DETECTOR	Provides real-time 9Hz frame rate, plus state-of-the-art thermal sensitivity and dynamic range
ADVANCED IMAGE PROCESSING	Sophisticated histogram-based image processing and video output pixel interpolation resolution for best-in-class image quality at all times
CUSTOMIZABLE ABSOLUTE COLOR	Patent pending non-linear colorization allows OEMs to define multiple color set points for quick, intuitive temperature recognition
WORLDWIDE VIDEO COMPATIBILITY	Selectable real-time NTSC or full-format PAL video output
SOPHISTICATED GUIs	Flexible OEM customization
OPEN ARCHITECTURE	Expansion port provides access to data along video processing chain for advanced OEMs*
INTEGRATION SUPPORT	Efficient and knowledgeable integration support available

*Contact L-3 at 800-990-3275 and ask for Technical Support to see if you qualify as an advanced OEM

Perimeter security



Fire scene with customizable absolute color

L3 communications
Infrared Products

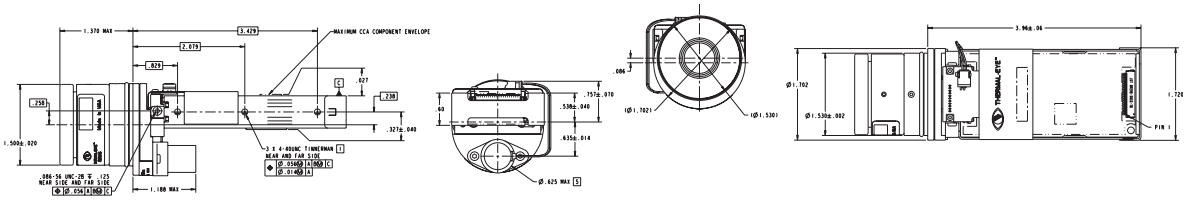
THERMAL-EYE 4500AS$_{9HZ}$ TECHNICAL SPECIFICATIONS:

FEATURES		4550AS$_{9HZ}$	4525AS$_{9HZ}$	4512AS$_{9HZ}$	4505AS$_{9HZ}$
FOCAL PLANE ARRAY	MATERIAL, STRUCTURE & FORMAT	Amorphous Silicon Microbolometer (320 x 240 pixel array)			
	SPECTRAL RESPONSE	7-14µm (filter bandwidth)			
	THERMAL SENSITIVITY	<50mK			
	REFRESH RATE	Real-time 9Hz			
THERMAL IMAGING SYSTEM PERFORMANCE	START-UP TIME	~ 4 seconds			
	CONTRAST/BRIGHTNESS	Advanced Image Processing			
	SATURATION TEMPERATURE	1100°F +/-10% w/auto electronic iris			
	RANGE TO DETECT HUMAN ACTIVITY	Up to 775ft (235m)	Up to 1465ft (445m)	Up to 3000ft (914m)	Up to 6670ft (2032m)
OPTICS	FOV ALTERNATIVES	50° x 37.5°	25° x 19°	12° x 9°	5.5° x 4.1°
	FOCUS METHOD	Manual adjustment only, Athermalized			
	F/#	1.0	1.2	1.0 Non-athermalized/ 1.2 Athermalized	1.0
VIDEO	ANALOG OUTPUT	NTSC (color); Real-time 9Hz Frame Rate — PAL (color); Real-time 9Hz Frame Rate			
	DIGITAL OUTPUT (OPTIONAL)	Full-resolution, 16-bits (corrected or uncorrected) or 24-bits (RGB color), plus control signals			
	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			
	CUSTOMIZABLE ABSOLUTE COLOR	3 OEM selectable color points are mapped to selectable absolute temperatures			
POWER	INPUT VOLTAGE	8 to 32VDC			
	INPUT POWER	~ 2.0W @ 25°C ambient, 12VDC			
INTERFACE & CONTROLS	CAMERA SETUP	USB (compatible with the USB 2.0 specifications)			
PHYSICAL CHARACTERISTICS	SIZE	See diagram below			
	WEIGHT	3.8oz (108g) without optics			
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	FOV ALTERNATIVES	Wide FOV 50° x 37.5° Athermalized	Medium FOV 25° x 19° Athermalized	Narrow FOV 12° x 9°, Non-athermalized/ Athermalized	Extremely Narrow FOV 5.5° x 4.1° Athermalized
	PART NUMBER	3000178-0001	3000178-0004	3000178-0002/ 3000178-0003	Preliminary/TBD
OPTIONAL ACCESSORIES	OEM DEVELOPER KIT	4000024-0001			
	3-CARD CARDCAGE KIT (INCLUDES CARDCAGE & RETAINER BRACKET; RECOMMENDED WHEN USING A DAUGHTERCARD)	4000036-0001			
	RS-232 SERIAL INTERFACE CCA KIT	3000224-0001			
ADDITIONAL CAMERA FUNCTIONS	– OEM software integration & customization GUIs (user parameters, symbology overlay, absolute color) – OEM expansion circuit card assembly mounting – OEM expansion port with real-time digital video (optional) and USB 2.0 compatible controls interface (works with USB and high-speed USB systems, peripherals and cables) – Selectable temperature indication of scene at central crosshair				

Specifications subject to change without notice

4500AS$_{9HZ}$ May 2009

This technical data and software is considered as Technology Software Publicly Available (TSPA) as defined in Export Administration Regulations (EAR) Part 734.7-11.
Exports of the 4500AS require a Department of Commerce License.



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