

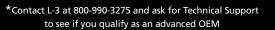
## 4500AS

- Our newest high-resolution infrared camera core
- Uses proven Amorphous Silicon Microbolometer detector technology (30µm 320 x 240 pixel array)
- The 4500AS is utilized in fire, security, military, public safety and other applications
- Fully compliant with the European Union's Restriction of Hazardous Substances (RoHS)



|                       | 24.5  |         |
|-----------------------|---|---------|
| FEATURE               | BENEFIT   | See See |
| HIGH RESOLUTION       | Better target resolution and longer stand-off range   | 11      |
| 30 MICRON<br>DETECTOR | Provides real-time 30Hz frame<br>rate, plus state-of-the-art thermal<br>sensitivity and dynamic range | Securi  |
| ADVANCED IMAGE        | Sophisticated histogram-based image processing and video output pixel interpolation                   |         |

| BETECTOR                       | sensitivity and dynamic range   |  |  |
|--------------------------------|---|--|--|
| ADVANCED IMAGE<br>PROCESSING   | Sophisticated histogram-based image processing and video output pixel interpolation resolution for best-in-class image quality at all times |  |  |
| CUSTOMIZABLE<br>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   |  |  |
| FLEXIBLE                       | Sophisticated, integrated GUIs<br>for OEM customization of<br>settings, logos and symbols   |  |  |
| OPEN<br>ARCHITECTURE           | Expansion port provides access<br>to data along video processing<br>chain for advanced OEMs*  |  |  |
| INTEGRATION                    | Efficient and knowledgeable   |  |  |



**SUPPORT** 



Security scene



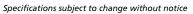
Fire scene

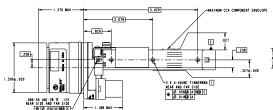


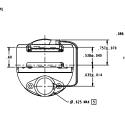
integration support available

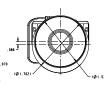
## **4500AS TECHNICAL SPECIFICATIONS:**

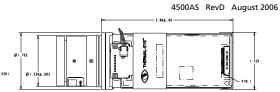
| F   | EATURES   | THERMAL-EYE<br>4550AS  | THERMAL-EYE<br>4525AS                   | THERMAL-EYE<br>4512AS                                       | THERMAL-EYE 4506AS (PRELIMINARY)                  |  |
|---|---|--|---|---|---|--|
| Focal Plane<br>Array                        | Material, Structure & Format  | Amorphous Silicon Microbolometer (320 x 240 pixel array)   |   |   |   |  |
|   | Spectral Response   | 7-14µm (filter bandwidth)  |   |   |   |  |
|   | Thermal Sensitivity   | <50mK  |   |   |   |  |
|   | Refresh Rate  | Real-time 30Hz   |   |   |   |  |
| Thermal<br>Imaging<br>System<br>Performance | Start-up Time   | ~ 4 seconds  |   |   |   |  |
|   | Contrast/Brightness   | Advanced Image Processing  |   |   |   |  |
|   | Saturation Temperature  | 1100°F +/-10% with automatic electronic iris   |   |   |   |  |
|   | Range to Detect Human Activity  | Up to 775ft (235m)   | Up to 1465ft (445m)                     | Up to 3330ft (1015m)  | Up to 6130ft (1860m)                              |  |
|   | FOV Alternatives  | 50° x 37.5°  | 25° x 19°                               | 12° x 9°  | 6° x 4.5°   |  |
| Optics                                      | Focus Method  | Manual adjustment only, Temperature stabilized Manual & Motorized, Athermalized  |   |   |   |  |
| Ο μιτο                                      | f/#   | 1.0  | 1.2                                     | 1.0 Non-athermalized/<br>1.2 Athermalized                   | 1.2   |  |
| 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   |   |   |   |  |
|   | 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                                    | Size  | See diagram below  |   |   |   |  |
| Characteristics                             | Weight  | 5.3oz. (150g) without optics   |   |   |   |  |
| Environmental                               | Operating Temperature   | -4°F to 185°F (-20°C to 85°C)  |   |   |   |  |
| Characteristics                             | Storage Temperature   | -40°F to 221°F (-40°C to 105°C)  |   |   |   |  |
| Ordering<br>Information                     | FOV Alternatives  | Wide FOV<br>50° x 37.5°<br>Athermalized  | Medium FOV<br>25° x 19°<br>Athermalized | Narrow FOV<br>12° x 9°<br>Non-athermalized/<br>Athermalized | Extremely Narrow FOV<br>6° x 4.5°<br>Athermalized |  |
|   | Part Number   | 7070345-0002   | 7070345-0004                            | 7070345-0003/<br>7070345-0005                               | TBD   |  |
|   | OEM Developer Kit   | 4000024-0001   |   |   |   |  |
| Optional<br>Accessories                     | 3-Card Cardcage Kit<br>(includes cardcage and retainer<br>bracket — recommended when<br>using a daughtercard) | 4000036-0001   |   |   |   |  |
|   | RS-232 Serial Interface CCA Kit   | 3000033-0001   |   |   |   |  |
|   | RS-232 with Electric Focus Kit  | N/A TBD  |   |   | BD  |  |
| Additional<br>Camera<br>Functions           | OEM expansion port with real-time   | omization GUIs (user parameters, symbology overlay, absolute color) ne digital video (optional) and USB 2.0 compatible controls interface USB systems, peripherals and cables)  • OEM expansion circuit card assembly mounting • Selectable temperature indication of scene at central crosshair |   |   |   |  |











This material is L-3 Infrared Products general capabilities information and does not contain any controlled technical data as defined within the International Traffic in Arms Regulations (ITAR) or Export Administration Regulations (EAR).

