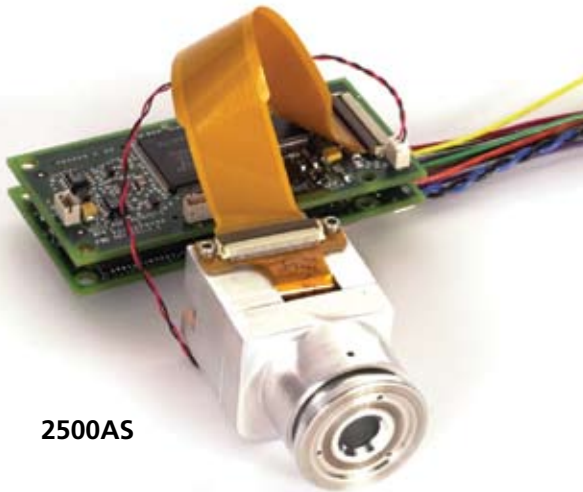


# 2000 Series

- Lightweight, long wavelength infrared camera core
- Utilizes proven Amorphous Silicon Microbolometer detector technology (46.8µm 160x120 pixel array)
- Thermal-Eye 2000 series is the first generation of Amorphous Silicon cameras that offers an affordable and compact solution for commercial applications



2500AS

| 2500AS/2600AS/2620AS FEATURES                   | 2500AS/2600AS/2620AS BENEFITS                                                                                                                                  |
|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>UNCOMPLICATED OEM AND SYSTEM INTEGRATION</b> | OEM and system integrators can easily apply their own unique packaging, display, power and control                                                             |
| <b>FLEXIBLE INTERCONNECT</b>                    | Lightweight and flexible interconnect design is conducive for multiple physical configurations such as headgear, helmets & hand-held or weapon-mounted systems |
| <b>UNSURPASSED INTEGRATION SUPPORT</b>          | Efficient and knowledgeable support for integration and redesign                                                                                               |

| ADDITIONAL 2600AS/2620AS FEATURES | ADDITIONAL 2600AS/2620AS BENEFITS                   |
|-----------------------------------|-----------------------------------------------------|
| <b>SMALLER SIZE</b>               | Smaller CCA size for improved packaging flexibility |
| <b>LOW-VOLTAGE INPUT</b>          | 2x AA battery input for portable applications       |



2600AS

| ADDITIONAL 2620AS FEATURE   | ADDITIONAL 2620AS BENEFIT                        |
|-----------------------------|--------------------------------------------------|
| <b>EXTENDED FEATURE SET</b> | Polarity switching and manual touch-up discretes |

# 2000 SERIES TECHNICAL SPECIFICATIONS:

| FEATURES                                                |                                                                                                                                                                                            | THERMAL-EYE™<br>2500AS                                                                                                                            |                                        | THERMAL-EYE™<br>2600AS                                                                                                                            |                                     | THERMAL-EYE™<br>2620AS                                                                                                                            |                                        |
|---------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|
| Focal Plane Array                                       | Material & Structure                                                                                                                                                                       | Amorphous Silicon Microbolometer (160 x 120 pixel array)                                                                                          |                                        |                                                                                                                                                   |                                     |                                                                                                                                                   |                                        |
|                                                         | Spectral Response                                                                                                                                                                          | 7-14 μm (filter bandwidth)                                                                                                                        |                                        |                                                                                                                                                   |                                     |                                                                                                                                                   |                                        |
|                                                         | Thermal Sensitivity                                                                                                                                                                        | ≤100mK                                                                                                                                            |                                        |                                                                                                                                                   |                                     |                                                                                                                                                   |                                        |
| Thermal Imaging System Performance                      | Start-up Time                                                                                                                                                                              | ~ 3 sec.                                                                                                                                          |                                        | ~ 5 sec.                                                                                                                                          |                                     | ~ 5 sec.                                                                                                                                          |                                        |
|                                                         | Contrast / Brightness                                                                                                                                                                      | Enhanced Image Processing                                                                                                                         |                                        | - Enhanced Image Processing<br>- Automatic Gain/Level Control<br>- Automatic Electronic Iris                                                      |                                     | - Enhanced Image Processing<br>- Automatic Gain/Level Control<br>- Polarity Switching/Control                                                     |                                        |
|                                                         | Range to Detect Human Activity                                                                                                                                                             | Up to 300 ft (90m) with 8.5mm lens                                                                                                                | Up to 1000 ft (305m) with 25mm lens    | Up to 300 ft (90m) with 8.5mm lens                                                                                                                |                                     | Up to 300 ft (90m) with 8.5mm lens                                                                                                                | Up to 1000 ft (305m) with 25mm lens    |
| Optics                                                  | FOV Alternatives                                                                                                                                                                           | 8.5mm Focal Length Wide FOV (50°x35°)                                                                                                             | 25mm Focal Length Medium FOV (17°x12°) | 8.5mm Focal Length Wide FOV (50°x35°)                                                                                                             |                                     | 8.5mm Focal Length Wide FOV (50°x35°)                                                                                                             | 25mm Focal Length Medium FOV (17°x12°) |
|                                                         | Focus Method                                                                                                                                                                               | Fixed                                                                                                                                             | Manual Adjust                          | Fixed                                                                                                                                             |                                     | Fixed                                                                                                                                             | Manual Adjust                          |
| Video                                                   | Output Format                                                                                                                                                                              | Analog: SMPTE-170 (cf. NTSC monochrome)                                                                                                           |                                        |                                                                                                                                                   |                                     |                                                                                                                                                   |                                        |
|                                                         | LCD Display Interface                                                                                                                                                                      | 5-pin connector providing +3.3 VDC, +5 VDC & video outputs                                                                                        |                                        | Connections for Kopin CyberDisplay™ LCD                                                                                                           |                                     |                                                                                                                                                   |                                        |
| Power                                                   | Input Voltage                                                                                                                                                                              | 8-32 VDC or 3-3.2 VDC (thru low voltage input)                                                                                                    |                                        | 8-32 VDC or 1.8-3.2 VDC (thru low voltage input)                                                                                                  |                                     |                                                                                                                                                   |                                        |
|                                                         | Input Power                                                                                                                                                                                | 1.5 W @ 25°C ambient                                                                                                                              |                                        | <1.4 W @ 77°F (25°C) ambient (<1.4 W with typical low power LCD-type display)                                                                     |                                     |                                                                                                                                                   |                                        |
|                                                         | Outputs Available                                                                                                                                                                          | 8-32 VDC or 3-3.2 VDC from high voltage input, 3.3, 3.7 & 5 VDC                                                                                   |                                        | 3.5 VDC regulated                                                                                                                                 |                                     |                                                                                                                                                   |                                        |
| Physical Characteristics                                | Size                                                                                                                                                                                       | <b>Electronic Boards:</b><br>3.3" L x 1.6" W (83.8mm L x 40.6mm W)<br><b>Optics/Head Assembly:</b><br>2.1" L x 1.1" dia. (53.3mm L x 27.9mm dia.) |                                        | <b>Electronic Boards:</b><br>2.5" L x 1.3" W (63.5mm L x 33.0mm W)<br><b>Optics/Head Assembly:</b><br>2.1" L x 1.1" dia. (53.3mm L x 27.9mm dia.) |                                     | <b>Electronic Boards:</b><br>2.5" L x 1.3" W (63.5mm L x 33.0mm W)<br><b>Optics/Head Assembly:</b><br>2.5" L x 1.3" dia. (63.5mm L x 33.0mm dia.) |                                        |
|                                                         | Weight                                                                                                                                                                                     | 5.6 oz (160g)                                                                                                                                     |                                        | 5.1 oz (145g)                                                                                                                                     |                                     | 5.0 oz (143g)                                                                                                                                     |                                        |
| Environmental Characteristics                           | Operating Temperature                                                                                                                                                                      | -4°F to 140°F (-20°C to 60°C)                                                                                                                     |                                        |                                                                                                                                                   |                                     |                                                                                                                                                   |                                        |
|                                                         | Storage Temperature                                                                                                                                                                        | -40°F to 185°F (-40°C to 85°C)                                                                                                                    |                                        |                                                                                                                                                   |                                     |                                                                                                                                                   |                                        |
| Ordering Information                                    | Part Number                                                                                                                                                                                | 8.5mm FOV (50°x35°)<br>4978574-0002                                                                                                               | 25mm FOV (17°x12°)<br>4978578-0001     | 8.5mm FOV (50°x35°)<br>1669215-0001                                                                                                               | 8.5mm FOV (50°x35°)<br>1669180-0003 | 25mm FOV (17°x12°)<br>1669180-0001                                                                                                                |                                        |
| Additional Camera Functions                             | <ul style="list-style-type: none"> <li>Choice of power input: 1.8 to 3.2 VDC or 8 to 32 VDC</li> <li>Flexible Interconnect allows multiple physical configuration possibilities</li> </ul> |                                                                                                                                                   |                                        |                                                                                                                                                   |                                     |                                                                                                                                                   |                                        |
| All specifications are subject to change without notice |                                                                                                                                                                                            | Thermal-Eye 2000 Series Rev A July 2005                                                                                                           |                                        |                                                                                                                                                   |                                     |                                                                                                                                                   |                                        |

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).