UNCOOLED XGA THERMAL CORE



SmartIR 1024



KEY FEATURES



PLUG AND PLAY THERMAL CAMERA CORE

LOW POWER CONSUMPTION

COMPACT FOR A LARGE CHOICE OF APPLICATIONS

For more information please contact:



BOCK OPTRONICS INC. 14 Steinway Blvd., Unit 7 Toronto, Ontario M9W 6M6

Tel: (416) 674-2804 sales@bockoptronics.ca www.bockoptronics.ca A SWaP-optimized, ultra-sensitive thermal imaging core with XGA resolution, ideal for demanding LWIR applications.

Designed for seamless integration, it delivers exceptional DRI performance for defense, UAVs, and PTZ systems, as well as high-speed inspection (machine vision) and active thermography (NDT). Compact, versatile, and perfect for mission-critical thermal imaging needs.

exosens.com

SmartIR 1024



KEY PERFORMANCES

| Sensor | Micro-bolometer technology |
|-------------------------------|-----------------------------|
| Resolution / Pixel Pitch | 1024 x 768 pixels / 17 μm |
| Spectral Range | 8 – 14 μm |
| Max NETD (F/1 ; 300K ; 30 Hz) | 50 mK |
| Operating temperature range | -40°C to +70°C |
| Power consumption (DF40) | < 2.5 W |
| Qualification | Industrial (Standard grade) |

FUNCTIONS & INTERFACES

| Image processing | BPC (Bad Pixel Correction), NUC (Non- Uniformity Correction), Shutterless NUC |
|-------------------------------|--|
| Image optimisation | AGC (Automatic Gain Control) |
| Output options | CL, SDI, DF40 |
| Dimensions (L x W x H) (DF40) | 52 x 48 x 25 mm ³ |
| Weight (DF40) | < 90 g |

PRODUCT SELECTOR GUIDE

XEN-000941

SmartIR1M0 50 mK (60Hz)

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UNCOOLED VGA THERMAL CORE



SmartIR 640



ULTRA-SENSITIVE THERMAL CORE

KEY FEATURES



PLUG AND PLAY THERMAL CAMERA CORE

LOW POWER CONSUMPTION

COMPACT FOR A LARGE CHOICE OF APPLICATIONS A SWaP optimized camera core with numerous generic variants suitable for integration.

The ideal candidate for highly demanding longwave infrared (LWIR) applications such as: high DRI performance systems (defense, SAR, UAVs, PTZ), high-speed inspection systems (machine vision) or active thermography (Non-Destructive Testing).

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SmartIR 640



KEY PERFORMANCES

| Sensor | Micro-bolometer technology |
|-------------------------------|-----------------------------|
| Resolution / Pixel Pitch | 640 x 480 pixels / 17 μm |
| Spectral Range | 8 – 14 μm |
| Max NETD (F/1 ; 300K ; 30 Hz) | < 40 mK or < 30 mK |
| Operating temperature range | -40°C to +70°C |
| Power consumption (DF40) | < 1.3 W |
| Qualification | Industrial (Standard grade) |

FUNCTIONS & INTERFACES

| Image processing | BPC (Bad Pixel Correction), NUC (Non- Uniformity Correction), Shutterless NUC |
|-------------------------------|--|
| Image optimisation | AGC (Automatic Gain Control) |
| Output options | CL, SDI, Analog, DF40, MIPI CSI-2 |
| Additional option | On DF40: Handheld/manual control interface + micro display interface |
| Dimensions (L x W x H) (DF40) | 30 x 30 x 23 mm ³ |
| Weight (DF40) | < 38 g |
| PRODUCT SELECTOR GUIDE | |

| XEN-000927 (SmartlR 640 40 mK, 9 Hz) | XEN-000928 (SmartIR 640 40 mK, 60 Hz) |
|--------------------------------------|---------------------------------------|
| XEN-000929 (SmartlR 640 30 mK, 9 Hz) | XEN-000930 (SmartIR 640 30 mK, 60 Hz) |

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