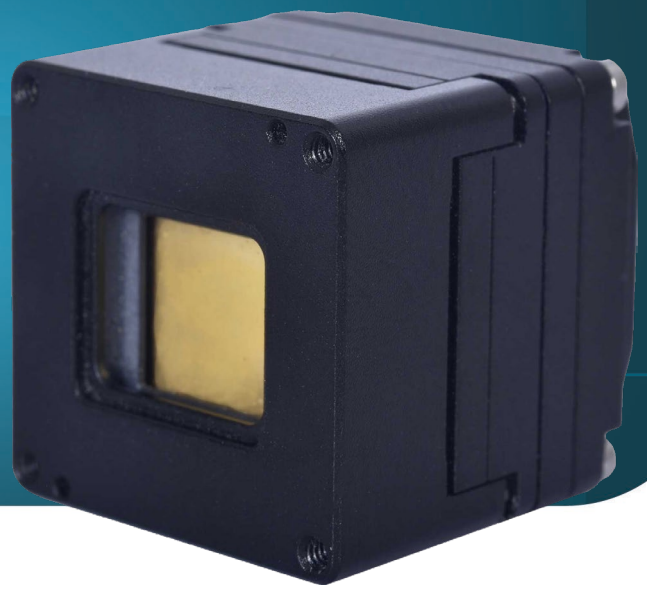
ULTRA-COMPACT UNCOOLED THERMAL CORE

Xenics
EXOSENS GROUP

# MicroCube XP 640 (NEW)



*ULTRA-COMPACT VGA CORE WITH EXTREME PERFORMANCE*

## KEY FEATURES

- **ULTRA-SWAP THERMAL CORE**
- **ADVANCED SHUTTERLESS IMAGING WITH EMBEDDED CORRECTION**
- **CONTOUR ENHANCEMENT: SHARPER DRI AND SUPERIOR OBJECT CLARITY**
- **COLUMN AND TEMPORAL DENOISING: NETD halved from 40 mK to 20 mK**
- **CONTRAST SHARPNESS CORE FOR AUTOFOCUS MANAGMENT**

The MicroCube XP (Extreme Performance) 640 delivers 640×480 resolution with a 12 µm pixel pitch and exceptional thermal sensitivity (NETD <20 mK), all in an ultra-compact form.

With fast startup (<0.7s), shutterless operation, and enhanced temperature stability, it ensures rapid, reliable performance. Contour enhancement provides improved contrast, DRI, and target visibility. Optimized for defense and mission-critical applications, its compact SWaP design and versatile interfaces enable seamless integration.

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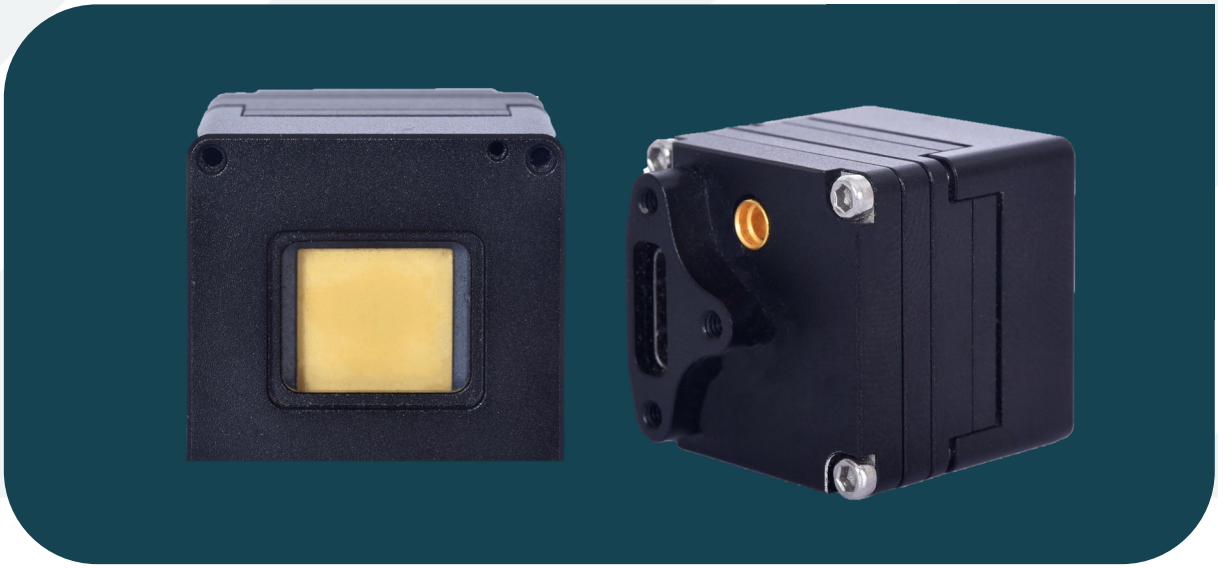

## KEY PERFORMANCES

| | |
|---|---|
| Sensor | Micro-bolometer technology |
| Resolution / Pixel Pitch | 640 x 480 pixels / 12 µm |
| Spectral Range | 8 – 14 µm |
| Max NETD (F/1 ; 300K ; 30 Hz) | < 20 mK with denoising |
| Operating temperature range | -20°C to +60°C |
| Power consumption (DF40) | < 1.2 W |
| Qualification | MIL-STD-810G – Method 514 Vibration: 10Hz - 2kHz 13.95g per axis 10h per axis |

## FUNCTIONS & INTERFACES

| | |
|---|---|
| Image processing | BPC (Bad Pixel Correction), NUC (Non Uniformity Correction), Shutterless NUC |
| Image optimisation | AGC (Automatic Gain Control) |
| Output options | MIPI-CSI, DF40 |
| Dimensions (L x W x H) (DF40) | 22.0 x 22.0 x 26.8 $mm^3$ |
| Weight (DF40) | < 25 gr |

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