

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 μ m 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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MicroCube XP 640 (NEW)



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	-40°C to +70°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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REVEAL THE INVISIBLE

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