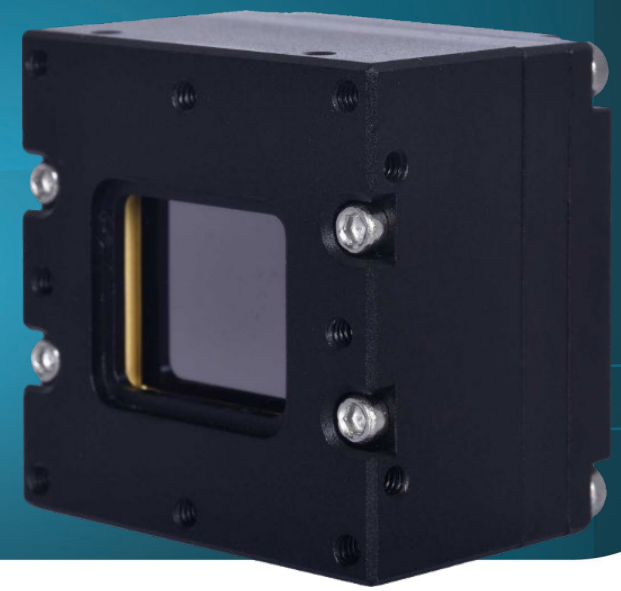
UNCOOLED VGA THERMAL CORE

Xenics
EXOSENS GROUP

SmartIR 640



ULTRA-SENSITIVE THERMAL CORE

KEY FEATURES

PLUG AND PLAY THERMAL CAMERA CORE

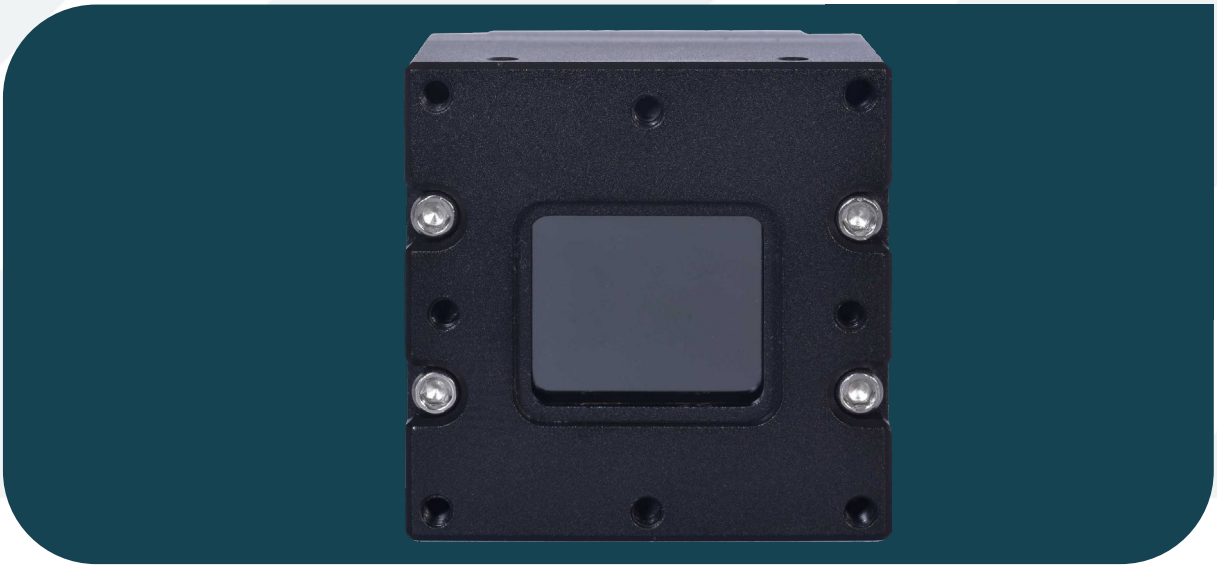
LOW POWER CONSUMPTION

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 long-wave 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).

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

advancedimaging@exosens.com

exosens.com

EXOSENS
REVEAL THE INVISIBLE

© Xenics. The information furnished is believed to be accurate and reliable but is not guaranteed and is subject to change without notice. No liability is assumed by Xenics nor by any Exosens Group companies. Performance data represents typical characteristics as individual product performance may vary. Customers should verify that they have the most current Xenics product information before placing orders. Texts and pictures may not be considered as contractually binding. This document may not be reproduced, in whole or in part, without the prior written consent of Xenics.

UNCOOLED VGA THERMAL CORE

Xenics
EXOSENS GROUP

SmartIR 1024

ULTRA-SENSITIVE THERMAL CORE

KEY FEATURES

PLUG AND PLAY THERMAL CAMERA CORE

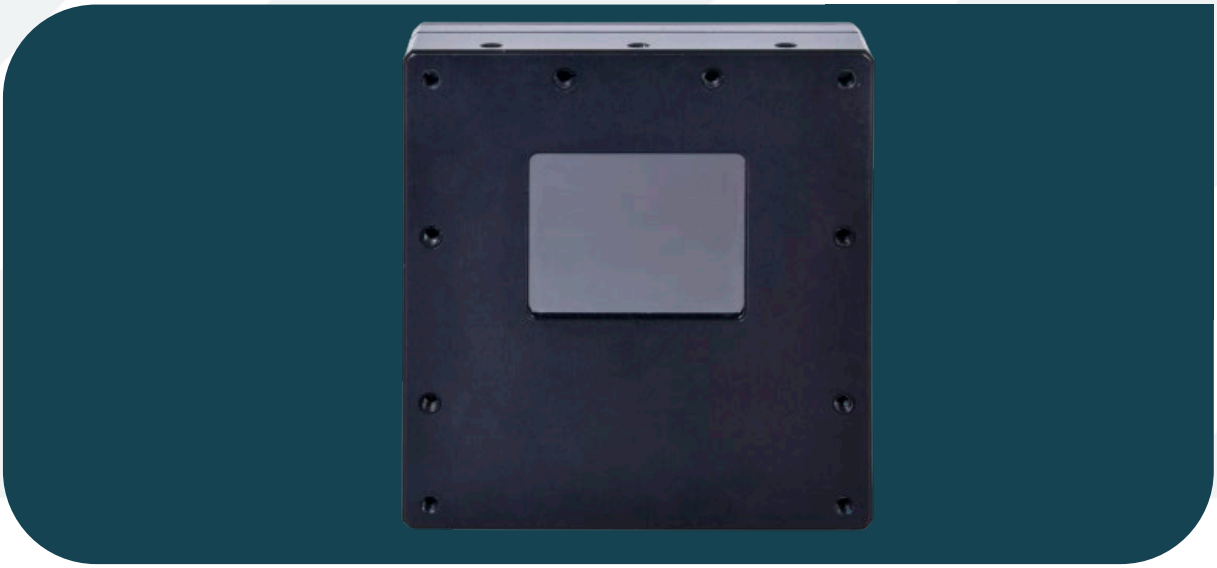
LOW POWER CONSUMPTION

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 long-wave 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).

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)

advancedimaging@exosens.com

exosens.com

EXOSENS
REVEAL THE INVISIBLE

© Xenics. The information furnished is believed to be accurate and reliable but is not guaranteed and is subject to change without notice. No liability is assumed by Xenics nor by any Exosens Group companies. Performance data represents typical characteristics as individual product performance may vary. Customers should verify that they have the most current Xenics product information before placing orders. Texts and pictures may not be considered as contractually binding. This document may not be reproduced, in whole or in part, without the prior written consent of Xenics.