



The Tenum 640 represents the smallest pixel pitch long-wave infrared camera core on the market. It delivers striking detail and sensitivity in a compact, cost-effective package.

DETAILS

The Tenum 640 is a cutting-edge, competitively-priced camera core that delivers exceptional imagery and is supported by a respected team of industry experts.

With a 10 micron pixel pitch and <30 mK NETD sensitivity, the Tenum 640 represents the latest evolution in low SWaP long-wave infrared technology. Made in the USA by Leonardo DRS, industry pioneers in high-sensitivity microbolometer technology, the series of 640×512 resolution cameras is distributed and supported in North America exclusively by Sierra-Olympic Technologies, Inc.

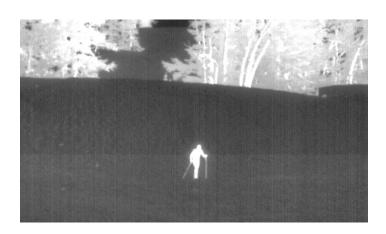
As a trusted supplier and OEM partner, Sierra-Olympic works directly with Tenum 640 customers to ensure successful systems integration, out-of-box operation, and follow-up support.

- **APPLICATIONS**
- + Security and surveillance
- + Machine vision
- + Search and rescue
- + Law enforcement
- + OEM integration
- + Unmanned vehicles
- + Traffic monitoring
- + Precision agriculture
- + Medical imaging



- + 10µ 640x512 uncooled VOx microbolometer sensor
- + 8 lens options + no-lens option available
- + Sensitivity <30 mK NETD with 3-D noise filter
- + 60 Hz frame rate (9 Hz option available)
- + Uncooled, compact, light, durable







TENUM 640®

HIGH-PERFORMANCE TEN-MICRON PIXEL PITCH LWIR

EXPORT CLASSIFICATION: DUAL USE

FEATURE SPECS

DETECTOR V V V		SYSTEM V		
Detector Type	Uncooled VOx Microbolometer	Analog video Output	NTSC/PAL (req. feature board)	
Array Format	640 x 512	Digital Video Output	14-bit/8-bit LVCMOS	
Pixel Pitch	10 Micron		or Camera Link®	
Spectral Response	LWIR (8 - 14um)	NUC	1-point with shutter or through lens	
Frame Rate	60 Hz (9 Hz option available)	Image Enhancement	Image Contrast Enhancement (ICE™) with gain and level bias controls	
Sensitivity (NEdT) @ f/1.0	<50 mK			
Sensitivity w/ 3-D noise filter	<30 mK	Color Palette Options	24-bit RGB & YUV (4,2,2) Superframe	
ENVIRONMENTAL				
Size (L x W x H)	No Lens: 31.3 × 28.8 × 27.2 mm 4.3 mm: 31.3 × 28.8 × 33.7 mm 5.5 mm: 31.3 × 28.8 × 38.0 mm 7.7 mm: 31.3 × 28.8 × 34.2 mm 9.3 mm: 31.3 × 28.8 × 30.0 mm 15 mm: 31.3 × 28.8 × 41.0 mm 20 mm: 31.3 × 28.8 × 43.2 mm 30 mm: 31.3 × 32.0 × 43.7 mm 35 mm: 31.3 × 45.0 × 57.2 mm	Digital Zoom and Pan	Region of interest, E-zoom from 1X - 4X	
		Camera Control/Command Interfaces/System Control	UART/RS-232, USB 2.0	
		Other Electrical Interfaces	External sync	
		LENS MODELS V V V	HFOV x VFOV	F/#
Weight	No Lens: 29g 4.3 mm: 41g 5.5 mm: 42g 7.7 mm: 39g 9.3 mm: 46g 15 mm: 45g 20 mm: 48g 30 mm: 84g 35 mm: 129g			-,"
		No Lens	No Lens	N/A
		4.3 mm	90° x 72°	1.2
		5.5 mm	70° x 56°	1.2
		7.7 mm	50° x 40°	1.3
		9.3 mm	40° x 32°	1.3
Input Voltage	3-5.5 V base configuration 4.5 - 18 V with feature board	15 mm	25° x 20°	1.2
		20 mm	18° x 15°	1.2
Power Dissipation (nominal)	<1.2 W base configuration <1.4 with feature board	30 mm	12° x 10°	1.3
Operting Temp Range	-40°C to +70°C	35 mm	10° x 8°	1.2
Mounting	Bulkhead			

This is a product of Leonardo DRS, for which Sierra-Olympia Technologies, Inc. is the exclusive North American distributor. Specifications and descriptions subject to change without notice.

IP67

Sealed Rating