



The 10-micron technology behind the all new Tenum® 1280 puts Leonardo DRS significantly ahead of its competitors in the race to smaller pixel pitch and lower cost products among manufacturers of infrared detectors.

DETAILS

The 10-micron Vanadium Oxide (VOx) microbolometer design is approximately 30% smaller than competing 12-micron FPAs. The design supports a variety of different lens configurations and the smaller pixel pitch of Tenum® 1280 enables smaller, lower cost optical lens assemblies. Tenum® 1280 offers backward compatibility with existing Tamarisk® products with similar interface, software protocols, feature sets, and camera control software.

Leonardo DRS maintains its position of leadership through continuous innovation and a commitment to ensuring that the product performance is never compromised for lower cost solutions. As evidence, Tenum® offers a proven 1280 x 1024 sensor capable of incredible sensitivity that is ideal for a variety of OEM applications.

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





- + 10 micron pixel pitch technology
- + No-lens modules weighing less than 70 grams
- + 1280 x 1024 (SXGA), 14-bit video
- + Integrated Image Processing







TENUM® 1280

THE NEW FRONTIER FOR UNCOOLED INFRARED

EXPORT CLASSIFICATION: DUAL USE

FEATURE SPECS

DETECTOR

Detector Type	Uncooled VOx Microbolometer		
Array Format	1280 x 960 1280 x 1024 (SXGA) default 1312 x 1056 max		
Pixel Pitch	10 Micron		
Spectral Response	LWIR 8-14µm		
Frame Rate	30 Hz (9 Hz option available)		
NETD	<30 mK		

ENVIRONMENTAL

V V V	
Power Dissipation (nominal)	2.3 W base configuration2.5 W with feature board
Operating Temp Range	-40°C to +70°C
Sealed Rating	IP67 (lens)

SYSTEM

Digital Video Output	14-bit/8-bit LVCMOS/ Camera Link®	
NUC	1-point with shutter or through lens	
Image Enhancement	Image Contrast Enhancement (ICE™) with gain and level bias controls	
Color Palette Options	24-bit RGB	
Digital Zoom and Pan	Region of interest, E-zoom from 1X to 4X	
Other Electrical Interfaces	External sync	
Input Voltage	3 - 5.5 V Base Configuration 4.5 - 18 V with Feature Board	

LENS MODELS

	No Lens	12.8 mm	25 mm	35 mm
HFOV x VFOV	N/a	60°	30°	21°
F/#	N/a	1.4	1.2	1.4
Size(LxWxH mm)	31x40x46	59x40x46	53x40x46	64×41×47
Weight	61g	140g	118g	136g

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