

VIENTO-10

10 MICRON LWIR WITH USB, SDI, MIPI OR GIGE CONNECTIVITY



With industry-standard interface options, Viento-10 is an easy-to-integrate, VGA resolution LWIR camera core that delivers best-in-class sensitivity, detail and clarity.

DETAILS

Viento-10 is built around an industry-leading 10-micron pixel pitch camera core by Leonardo DRS. With custom-developed interface boards providing fully integrated USB 3.0 or GigE Vision® or MIPI connectivity, Viento-10 delivers universal, out-of-the-box functionality for end-users, OEMs and integrators.

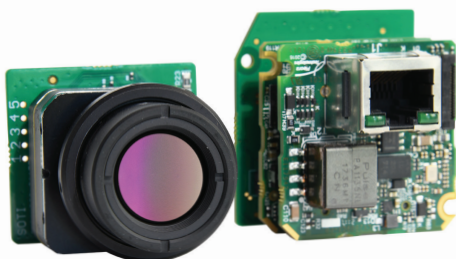
A 60 Hz frame rate, a growing suite of lens options and IP67 capability make this a versatile, high-performance camera core for a wide range of thermal imaging applications.

- + USB, GigE, MIPI or SDI
- + Responsive customer service
- + Quality assured
- + Direct engineering support
- + For OEM Integrators
- + ISO 9001:2015 company

APPLICATIONS

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

- + 10 μ 640x512 uncooled VOx microbolometer
- + Variety of lens options available
- + Sensitivity <20 mK NETD with 3-D noise filter
- + 60 Hz frame rate (9 Hz option available)
- + Smaller, lighter, more affordable optics



Viento-10 GigE

VIENTO-10

10 MICRON LWIR WITH USB MIPI, SDI OR GIGE CONNECTIVITY EXPORT CLASSIFICATION: DUAL USE

FEATURE SPECS

DETECTOR

	USB	GigE	SDI	MIPI
Detector Type	Uncooled VOx Microbolometer	Uncooled VOx Microbolometer	Uncooled VOx Microbolometer	Uncooled VOx Microbolometer
Array Format	640 x 512	640 x 512	640 x 512	640 x 512
Pixel Pitch	10 Micron	10 Micron	10 Micron	10 Micron
Spectral Response	LWIR	LWIR	LWIR	LWIR
Frame Rate	60 Hz 9 Hz available	60 Hz 9 Hz available	60 Hz	60 Hz
Bit Depth	14-bit	14-bit	14-bit	14-bit
NETD	<20 mK (normalized, filtered) <50 mK (normalized)	<20 mK (normalized, filtered) <50 mK (normalized)	<20 mK (normalized, filtered) <50 mK (normalized)	<20 mK (normalized, filtered) <50 mK (normalized)

ENVIRONMENTAL

	USB	GigE	SDI	MIPI
Operating Temperature	-40°C to +70°C	-40°C to +70°C	-40°C to +70°C	-40°C to +70°C
Power Dissipation	2W Typical, 6.5W Max	PoE	5-14V	Typical 2.25W, 6.5W Max
Input Voltage	Ext. Power 5V. USB powered from USB3, BC1.1 compliant port	PoE	5-14 Volts	5 Volts

SYSTEM

	USB	GigE	SDI	MIPI
Digital Video Output	USB3.0 UVC	GigE Vision 8-bit/14-bit	HD-SDI 720p60/30 format	MIPI-CSI2 (1, 2, or 4 lane) -- Y16, Y800, YUV
NUC	1-point with shutter or through lens	1-point with shutter or through lens	1-point with shutter or through lens	1-point with shutter or through lens
Image Enhancement	Image Contrast Enhancement (ICE™) with gain and level bias controls	Image Contrast Enhancement (ICE™) with gain and level bias controls	Image Contrast Enhancement (ICE™) with gain and level bias controls	Image Contrast Enhancement (ICE™) with gain and level bias controls
Color Palette Options	YUV422	YUV422	YUV422	YUV422
Digital Zoom/Pan	1X to 4X	1X to 4X	1X to 4X	1X to 4X
Symbology	N/A	N/A	N/A	N/A
Camera Control/Command Interfaces/System Control	USB-C	Virtual Serial Pass-through	Serial Pass-through	Serial Pass-through

LENS MODELS

	No Lens	4.3mm	5.5mm	7.7mm	15mm	20mm	30mm	35mm	55mm	73mm
FOV	N/A	90° x 72°	70° x 56°	49° x 40°	25° x 20°	18° x 15°	12° x 10°	10° x 8°	6.4° x 5.1°	5.0° x 4.0°
F#	N/A	1.2	1.2	1.3	1.2	1.2	1.3	1.2	1.0	1.05