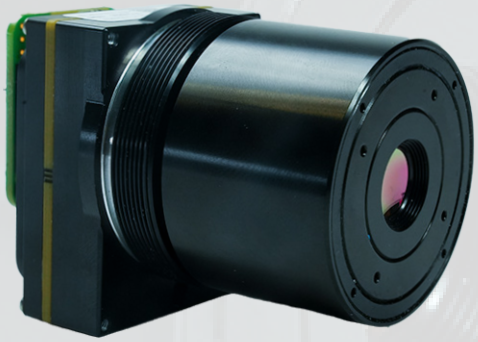
SIERRA-OLYMPIA
TECHNOLOGIES INC.



VIENTO HD10

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

With three connectivity options, Viento HD10 is an easy-to-integrate, LWIR camera core that delivers best-in-class sensitivity, detail and clarity in a Low-SWaP package.

DETAILS

The Viento HD10 is built around the 10µm pixel pitch camera core by Leonardo DRS. The small pixel pitch increases range and acuity with a best-in-class array resolution preserveing field-of-view. The Viento HD10 is an unparalleled choice for applications where situational awareness and DRI are critical. Custom interface boards make prototyping, demonstration, and integration fast and easy with options for USB 3.0, GigE Vision®, MIPI and SDI. Supporting documentation for each interface gives out-of-the-box connectivity so work can start immediately.

+ USB, GigE, MIPI or SDI
+ Responsive customer service
+ Quality assured
+ Direct engineering support
+ Items in stock, ready to ship
+ ISO 9001:2015 company

APPLICATIONS

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

Viento HD10 GigE

+ 10µm uncooled VOx microbolometer
+ Onboard Image Processing
+ Sensitivity <30 mK NETD with 3-D noise filter
+ 30 Hz frame rate (9 Hz option available)
+ Family of lens and interface options

Railyard from cliffside

Close Up Dump Truck

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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	1280 x 1024 (SXGA)	1280 x 1024 (SXGA)	1280 x 1024 (SXGA)	1280 x 1024 (SXGA)
Pixel Pitch	10 Micron	10 Micron	10 Micron	10 Micron
Spectral Response	LWIR 8-14 Micron	LWIR 8-14 Micron	LWIR 8-14 Micron	LWIR 8-14 Micron
Frame Rate	30 Hz | 9 Hz available	30 Hz | 9 Hz available	30 Hz | 9 Hz available	30 Hz | 9 Hz available
Bit Depth	14-bit	14-bit	14-bit	14-bit
NETD	<30 mK (normalized, filtered) <60 mK (normalized)	<30 mK (normalized, filtered) <60 mK (normalized)	<30 mK (normalized, filtered) <60 mK (normalized)	<30 mK (normalized, filtered) <60 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	2.7W Typical, 4.6W max	5.0W Typical	3.7W Typical, 7.7W max	Typical 3W, 6.5W max estimated
Input Voltage	5 volts, Powered via USB3.0	PoE	5-17 volts	4.75 - 5.5 Volts

SYSTEM

	USB	GigE	SDI	MIPI
Digital Video Output	USB3.0 UVC: Y16, Y800 and YUY2 1280 x 1024 Only	See IP Video Output	HD-SDI 1080p30 format Centered in frame with black borders.	MIPI Video output
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 Eleven predefined color palettes and one customizable color pallette	YUV422 Eleven predefined color palettes and one customizable color pallette	YUV422 Eleven predefined color palettes and one customizable color pallette	YUV422 Eleven predefined color palettes and one customizable color pallette
Digital Zoom/Pan	Region of interest 1X to 4X	Region of interest 1X to 4X	Region of interest 1X to 4X	Region of interest 1X to 4X
Camera Control/Command Interfaces/System Control	USB-C	Virtual Serial Pass-through	Serial Pass-through	External UART (3.3V TTL), I2C Pass-through

LENS MODELS

	No Lens	12.8mm	25mm	35mm
FOV	N/A	60° x 47°	30° x 23°	21° x 17°
F#	N/A	1.4	1.2	1.4

For more information please visit SierraOlympia.com