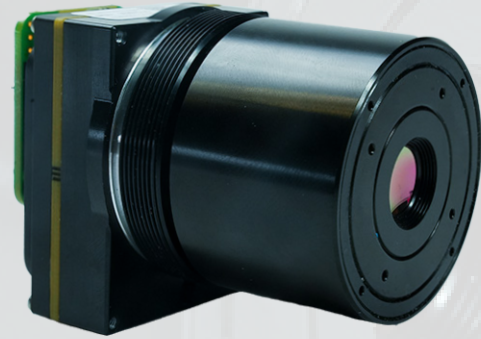# VIENTO HD10

TEN-MICRON LWIR WITH USB, GIGE 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®, and SDI. Supporting documentation for each interface gives out-of-the-box connectivity so work can start immediately.

+ 25+ Years industry leadership
+ 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

+ 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

Viento HD10 GigE

Close Up Dump Truck

VIENTO HD10
TEN-MICRON LWIR WITH USB, GIGE OR SDI CONNECTIVITY
EXPORT CLASSIFICATION: DUAL USE

FEATURE SPECS

DETECTOR

	USB	GigE	SDI
Detector Type	Uncooled VOx Microbolometer	Uncooled VOx Microbolometer	Uncooled VOx Microbolometer
Array Format	1280 x 960, 1280 x 1024 (SXGA) default, 1312 x 1056 max	1280 x 960, 1280 x 1024 (SXGA) default, 1312 x 1056 max	1280 x 960, 1280 x 1024 (SXGA) default, 1312 x 1056 max
Pixel Pitch	10 µm	10 µm	10 µm
Spectral Response	LWIR	LWIR	LWIR
Frame Rate	30 Hz | 9 Hz available	30 Hz | 9 Hz available	30 Hz | 9 Hz available
Bit Depth	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)

ENVIRONMENTAL

	USB	GigE	SDI
Operating Temperature	-40ºC to +70ºC	-40ºC to +70ºC	-40ºC to +70ºC
Power Dissipation	2.7W Typical, 4.6W max	5.0W Typical	3.7W Typical, 7.7W max
Input Voltage	External Power 5V Some USB3.0 can power	PoE	5-14V

SYSTEM

	USB	GigE	SDI
Digital Video Output	USB3.0 UVC: Y16, Y800 and YUY2 1280 x 1024 Only	See IP Video Output	HD-SDI 1080p30 format center frame w/ black borders
IP Video Output	N/a	GigEVision Pixel Format: Mono14, Mono8, YCbCr709_422_8_CbYCrY	N/a
NUC	1-point w/ shutter or through lens	1-point w/ shutter or through lens	1-point w/ 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
Color Palette Options	YUV422	YUV422	YUV422
Digital Zoom/Pan	1x to 4x	1x to 4x	1x to 4x
Symbology	N/a (TBR)	N/a (TBR)	N/a (TBR)
Camera Control/Command Interfaces/System Control	USB-C	Virtual serial pass-through via IP	Serial pass-through

LENS MODELS

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

For more information please visit SierraOlympia.com