



## **Trax/UV™ – UV Enhanced GigE Monochrome Camera, 15 fps**

### **Features**

- 2/3 inch CCD monochrome progressive scan sensor
- Enhanced UV sensitivity in the 230 to 400 nm spectral range
- Wide spectral response
- GigE standard interface
- Image data is transferred at 1Gbps, 10bit and non-compressed image
- GigE Vision/Gen1 cam compliant
- Captures full images at speeds up to 15 frames per second
- 1360 (H) x 1024 (V) pixels
- Cell size – 6.45  $\mu\text{m}$  x 6.45  $\mu\text{m}$
- 4:3 aspect ratio
- Random Trigger Shutter
- Scalable (ROI) function
- Ships with GigE Vision compliant software – supports Windows® 7, Vista, and XP
- Light weight – 120 grams
- Compact size – less than 2 inches wide

### **Applications**

- High Speed Video Capture
- Machine Vision
- Factory Automation
- Robotics
- Military
- Medical/Scientific Imaging

**High Speed, High Resolution UV Enhanced, C Mount, CCD Black and White Machine Vision Camera which Captures SXGA (1360 x 1024) Resolution Images in Low Light Conditions, at 15 fps. Less than 2 Inches Wide. For Machine Vision, Parts Inspection, Robotics, Military, and Medical/ Science Applications.**



### **Overview**

The Trax/UV™ is a compact UV enhanced camera with a GigE (Gigabit Ethernet) interface and a 2/3 inch CCD monochrome progressive scan sensor. The camera offers SXGA resolution (1360 x 1024 pixels) plus a full image speed of 15 frames per second. The Trax/UV features random shutter mode and a scalable ROI (region of interest) function.

The Trax/UV is ideal for various kinds of machine vision applications, especially those requiring enhanced UV sensitivity in the 230 nm to 400 nm spectral range. Now you have a CCD camera with a wide spectral response from 230 nm to 1050 nm and a variable integration time, so you can achieve a wide dynamic range over a wide spectral range.

Typically CCD cameras have almost no sensitivity to light below 400 nm. With our enhancements, we have extended the range of the Trax/UV camera down to approximately 230 nm making it possible to use this camera from UV all the way to Near IR.

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# Specifications

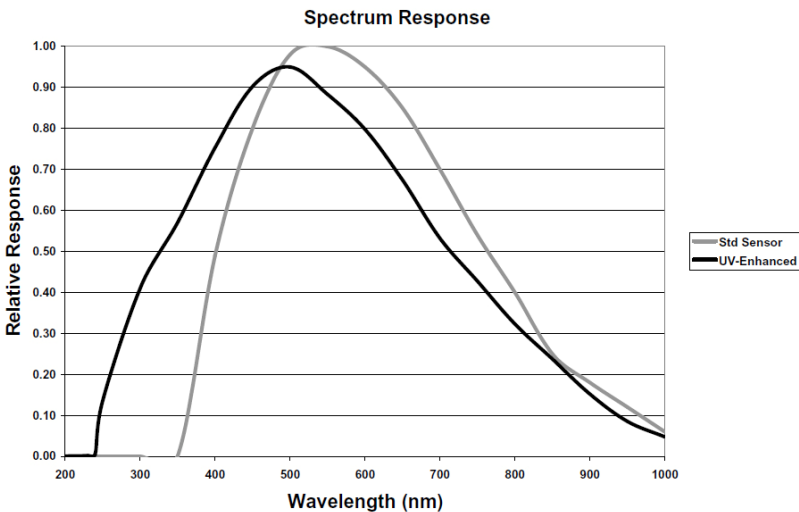
## General Specifications

Image Sensor	CCD image sensor, 2/3 type
Frame Rate	15 fps (1360 x 1024)
Spectral Response	230 nm to 1050 nm (UV to Near IR)
Active Pixels	1360 (H) x 1024 (V)
Pixel Size	6.45 μm x 6.45 μm (square grid)
Scan Method	Progressive
Aspect Ratio	4:3
Video Output	Gigabit Ethernet (IEEE802.3ab)
Sync	Internal Sync
Gain Control	0 - +12 dB (91 steps) Default setting 0 dB
Gamma	OFF (1.0 fixed)
Input Signal	5V logic level
Random Trigger Shutter	Fixed mode, pulse width mode
Set up Level	6.3% - 25% (192 steps) Default setting 6.3% (about 16 digits)

## Physical and Power

Power	DC 12V, maximum 3 watts
Mount	C Mount
Dimensions	44 (W) x 29 (H) x 70 (D) mm 1.73 (W) x 1.14 (H) x 2.76 (D) inches (Not including protruding parts)
Weight	120 grams (without lens) 4.23 ounces (without lens)
Safety Standards	CE, FCC

## Spectrum Response Chart



# Camera Connectors

## Gigabit Ethernet RJ45 Interface Connector

Pin No.	I/O	Function
1	I/O	BI_DA+
2	I/O	BI_DA-
3	I/O	BI_DB+
4	I/O	BI_DB-
5	I/O	BI_DC+
6	I/O	BI_DC-
7	I/O	BI_DD+
8	I/O	BI_DD-

## Power and Trigger Connector

Pin No.	Signal
1	GPIO0
2	GND
3	GND
4	TRIG_IN
5	GPIO1
6	+12V

## Ordering Information

**VCUV-GigE: Trax/UV – UV Enhanced Monochrome Camera**