

[See all 7 Products in Family](#)

# Photometrics Retiga E9 USB 3.2 Camera, 1T-01-RET-E9-M-C



Stock #90-395 **NEW** [CONTACT US](#)

1 **C\$13,425<sup>00</sup>**

**ADD TO CART**

**Volume Pricing**

Qty 1+	C\$13,425.00 each
Need More?	<a href="#">Request Quote</a>

**Product Downloads**

Monochrome

**Spectrum:**

**General**

Monochrome Camera

**Type:**

1T-01-RET-E9-MC

**Model Number:**

Teledyne Photometrics

**Manufacturer:**

Retiga E **Camera Series:**

**Note:**

Includes:  
USB Cables  
USB Interface Card  
12V/ 5A power supply with international power cord set  
(2) Single-line MMCX trigger cables  
USB memory device containing PVCAM library and drivers  
Quick Installation Guide

### Physical & Mechanical Properties

86 x 86 x 89 **Dimensions (mm):**

800 **Weight (g):**

Full **Housing:**

### Optical Properties

400 - 1000 **Wavelength Range (nm):**

### Sensor

1" **Sensor Format:**

9.00 **Resolution (Megapixels):**

25.00 **Frame Rate (fps):**

3,000 x 3,000 **Pixels (H x V):**

11.28 x 11.28 **Sensing Area, H x V (mm):**

Sony IMX533 **Imaging Sensor:**

Progressive Scan CMOS **Type of Sensor:**

Rolling **Shutter Type:**

16 bit **Pixel Depth:**

Up to an hour **Exposure Time:**

92 **Dynamic Range (dB):**

### Hardware & Interface Connectivity

USB 3.2 **Connector:**

GPIO with #90-399 **Power Supply:**

1 configurable input, 3 configurable outputs **GPIOs:**

Hardware Trigger (GPIO) or Software Trigger **Synchronization:**

Back Panel **Interface Port Orientation:**

BNC **GPIO Connector Type:**

### Threading & Mounting

C-Mount **Mount:**

(1) ¼-20 thread per side **Mounting Threads:**

### Environmental & Durability Factors

0 to 30 **Operating Temperature (°C):**

-20 to 60 **Storage Temperature (°C):**

### Regulatory Compliance

Exempt **RoHS 2015:**

## Product Details

- Long Exposure CMOS (Over 60 Minutes)
- Feature Extended Dynamic Range (EDR)
- Dual Imaging Modes for Flexibility
- Scientific Cameras for High Sensitivity Microscopy Applications



Teledyne  
Authorized  
Distributor

Teledyne Photometrics Retiga E USB Cameras feature ultra-low dark current (<0.001 electrons/pixel/second), enabling exposure times of over an hour for low-light and long-duration imaging. The cameras feature EDR mode, which combines a large full-well capacity with low read noise to capture both intense and weak signals in the same image. The Retiga E series offers dual imaging modes; a long exposure mode enables ultra-sensitive, low-light imaging, and a fast capture mode for high-speed acquisition. The dual modes provide flexible performance for both static and dynamic scientific applications. Teledyne Photometrics Retiga E USB Cameras are ideal for time-lapse imaging in cell colony growth, fluorescence microscopy, and bioluminescence/chemiluminescence imaging. These cameras include Teledyne's proprietary-designed software platforms, Beacon and PVCAM, for optimizing camera performance and ease of system integration.

### Long Exposure Imaging

Thanks to major breakthroughs in thermal noise control, Retiga E CMOS cameras have an unprecedented ultra-low dark current of <0.001 electrons per pixel per second, allowing for exposure times of over an hour.

Stretching exposure times from seconds to minutes to hours in this manner results in comfortable detection of even the weakest signals, ideal for imaging luminescence.



### Extended Dynamic Range

As well as Speed and Long Exposure modes, Retiga E cameras feature Extended Dynamic Range (EDR) mode, which combines a large full well capacity with a low read noise to result in ~2.5x more dynamic range than other modes, easily capturing both intense and weak signals in the same image.



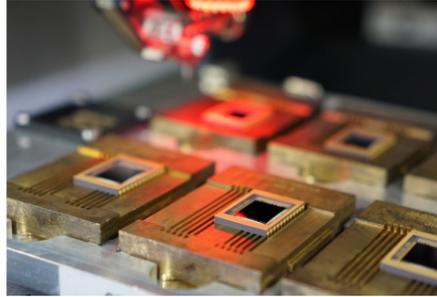
### **Small Pixel Imaging**

The Retiga E20 features our smallest-ever pixel at 2.4  $\mu\text{m}$ , which results in high-resolution imaging at even the lowest magnifications. Combined with a 20-Megapixel array (5472 x 3648) the Retiga E20 can pick out even the smallest details from large samples in a high-throughput manner.

With low noise contribution and a high peak QE, the Retiga E20 will deliver high quality images of your samples even in low-light conditions.

### **High Speed Mode**

As well as the 'Long Exposure' mode, Retiga E cameras feature a 'Fast Capture' mode that operates at 100 fps for the Retiga E7, across the full 7 megapixel sensor. This flexibility allows the Retiga E7 to capture fast, dynamic signals, or to switch to long exposure in order to service a wide range of imaging applications.



### **OEM Integration**

Interfacing is simple with the Retiga E Family by design. With their compact format and single cable interface, hardware integration is straightforward. The addition of onboard triggering, Windows/Linux support, and our dedicated OEM team make integrating and customising the Retiga E7 or Retiga E20 a painless process.