

[See all 21 Products in Family](#)

## BFLY-PGE-13E4M-CS 1/1.8" Blackfly® PoE GigE Monochrome Camera

See More by [Teledyne FLIR](#)



Teledyne FLIR IIS Blackfly® GigE Cameras (Front)



Stock #88-043 **2 In Stock**

1 €486<sup>00</sup>

**ADD TO CART**

Volume Pricing	
Qty 1+	€486,00 each
Need More?	<a href="#">Request Quote</a>

Prices shown are exclusive of VAT/local taxes

**Note:** This item requires accessories for use | [Learn More](#)

### Product Downloads

Monochrome

Spectrum:

### General

Monochrome Camera

Type:

BFLY-PGE-13E4M-CS	<b>Model Number:</b>
FLIR	<b>Manufacturer:</b>
Blackfly®	<b>Camera Series:</b>

## Physical & Mechanical Properties

29 x 29 x 30 (excludes connectors and lens mount)	<b>Dimensions (mm):</b>
90	<b>Weight (g):</b>
Full	<b>Housing:</b>

## Sensor

16MB	<b>Image Buffer:</b>
1/1.8"	<b>Sensor Format:</b>
1.30	<b>Resolution (Megapixels):</b>
60.00	<b>Frame Rate (fps):</b>
1,280 x 1,024	<b>Pixels (H x V):</b>
5.3 x 5.3	<b>Pixel Size, H x V (µm):</b>
6.78 x 5.43	<b>Sensing Area, H x V (mm):</b>
e2v EV76C560	<b>Imaging Sensor:</b>
Progressive Scan CMOS	<b>Type of Sensor:</b>
Global	<b>Shutter Type:</b>
10 bit	<b>Pixel Depth:</b>
15µs - 1s	<b>Exposure Time:</b>
51.96 (Mode 0) 60.21 (Mode 7)	<b>Dynamic Range (dB):</b>
GigE Vision v1.2	<b>Machine Vision Standard:</b>

## Electrical

2	<b>Power Consumption (W):</b>
---	-------------------------------

## Hardware & Interface Connectivity

GigE (PoE)	<b>Interface:</b>
GigE, RJ45 with Screw Locks	<b>Connector:</b>
Power Supply Required and Sold Separately. USA: <a href="#">#88-063</a> Europe: <a href="#">#88-063</a> Japan: <a href="#">#88-063</a> Korea: Not Available China: <a href="#">#88-063</a>	<b>Power Supply:</b>
1 opto-isolated input, 1 opto-isolated output	<b>GPIOs:</b>
Hardware Trigger (GPIO) or Software Trigger	<b>Synchronization:</b>
Back Panel	<b>Interface Port Orientation:</b>
6-pin Hirose (HR10)	<b>GPIO Connector Type:</b>

## Threading & Mounting

CS-Mount	<b>Mount:</b>
¼-20 with Tripod Mount Adapter <a href="#">#88-210</a>	<b>Mounting Threads:</b>

## Environmental & Durability Factors

0 to +45 **Operating Temperature (°C):**

-30 to +60 **Storage Temperature (°C):**

## Regulatory Compliance

[Exempt](#) **RoHS 2015:**

[View](#) **Certificate of Conformance:**

[Contains SVHC\(s\)](#) **Reach 240:**

## Product Details

Two GigE cables are required if using the PoE injector. Use ([#03-618](#)) 5mm Spacer to convert CS-Mount Cameras to C-Mount. Software available for [download](#).

- Ultra-Compact Design
- Power over Ethernet (PoE) for Maximum Flexibility
- Includes Image Capture Software and FlyCapture2 SDK
- [USB3](#) Versions Also Available



Teledyne  
Authorized  
Distributor

### Teledyne FLIR IIS Blackfly®: Legacy series Machine Vision Cameras that fit anywhere

The Blackfly® camera line combines Sony, Aptina, and e2v sensors with a host of unique features.

The **Blackfly®** machine vision camera line combines the high throughput of USB 3.0 or GigE, offering a number of highly sensitive sensors. The camera combines a comprehensive list of unique features, offering industry-leading capabilities, affordability, and uncompromising value. The ultra-compact Blackfly camera measures 29 x 29 x 30mm, weighs just 36 grams, uses 3 watts of power, and includes a 3-year warranty.

The **Blackfly®** is available with either color or monochrome sensors, providing a versatile imaging solution to easily obtain the exact images required to accelerate application development. A range of camera accessories and a common form factor provide a consistent platform for integration across the range of available sensor formats, resolution, and frame rates.

**Note:** Two GigE cables are required if using the PoE injector. Use ([#03-618](#)) 5mm Spacer to convert CS-Mount Cameras to C-Mount. Software available for [download](#).

### Blackfly® GigE color / monochrome

- Models are available with various image sensors in a range of resolutions: 1.2 MP, 1.3 MP, 2.0 MP, 2.3 MP, 3.2 MP, and 5.0 MP

#### Features

- Perfect analog camera replacement
- Data interface options: either GigE or [USB3](#)
- CS-mount
- Ultra-compact form factor, measuring 29 x 29 x 30mm, weighs only 36g
- On-camera image processing includes color interpolation, gamma, and LUT
- 16 MByte frame buffer
- LED status indicator
- Supports partial readout via ROI, binning, decimation
- Triggering modes include standard, bulb, overlapped, multi-shot (not all sensors support all modes)
- 2 user configuration sets for custom camera settings
- Bit depth: 10 or 12-bit
- Advanced auto-algorithms or precise manual control over image capture and on-camera pre-processing
- Windows or Linux platforms (32 or 64-bit)
- Camera control via FlyCapture SDK or 3rd-party USB3 Vision software

#### Applications

- Life science instrumentation
- Factory automation
- Biometrics kiosk solutions
- Ophthalmoscopy
- 3D scanning
- Automated optical inspection
- Food & Beverage industry