

# TACHYON 16k CAMERA

Uncooled MWIR 128x128 pixels infrared camera with high-speed frame rates up to 2000 images per second

Maximum added value and affordability to ensure a full integration in the INDUSTRY 4.0 applications



**GIG** VISION GEN*i*CAM

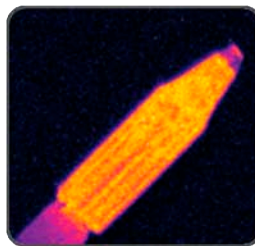
- ▶ Detector type: VPD PbSe FPA with digital interface, uncooled operation
- ▶ Array format: 128x128 (16384 pixels)
- ▶ Pixel size: 50  $\mu\text{m}$  x 50  $\mu\text{m}$  (square format)
- ▶ Spectral range: MWIR, 1.0  $\mu\text{m}$  to 5.0  $\mu\text{m}$
- ▶ Peak wavelength of detection: 3.7 microns
- ▶ Integration time: 10 - 1000  $\mu\text{s}$ , selectable
- ▶ Raw data communication, 14 bit
- ▶ Interfaces:
  - ▶ GigE VISION 2.0 with PoE
  - ▶ Multipurpose DI/DO connector (trigger IN/OUT)
- ▶ Frame rate: 2000 images per second (max) @ full frame (interlaced acquisition)
- ▶ ROI windowing function (faster frame rates, snapshot acquisition)
- ▶ Mechanical shutter for 1-pt offset correction
- ▶ Start-up time: < 10 seconds
- ▶ Power supply: PoE, 8 W (non-PoE operation requires 12 VDC)
- ▶ Metal housing with rear connectors and tripod screw holes (M3 and M4)
- ▶ Dimensions and weight (without lens): 66 (L) x 62 (W) x 62 (H) (mm), 400 grams
- ▶ CS-mount optics interface, optics available:
  - ▶ 10.5° x 10.5°, f/1.1, 35 mm, manual focus (standard option)
  - ▶ 15.2° x 15.2°, f/1.2, 24 mm, manual focus
- ▶ Software included:
  - ▶ NIT SOFTWARE SUITE (Acquisition and visualization SW)
  - ▶ GeniCam compatible for custom software programming
- ▶ Minimum temperature of detection: 100 °C
- ▶ Industrial applications: machine vision, additive manufacturing, industrial process monitoring, gas detection, spectroscopy, glass manufacturing quality assurance, UAV



**Additive manufacturing monitoring**



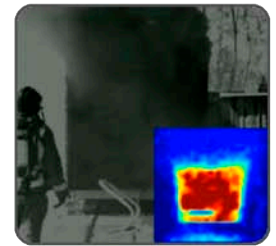
**Manufacturing process control**



**Machine vision applications**



**Gas and spectroscopy**



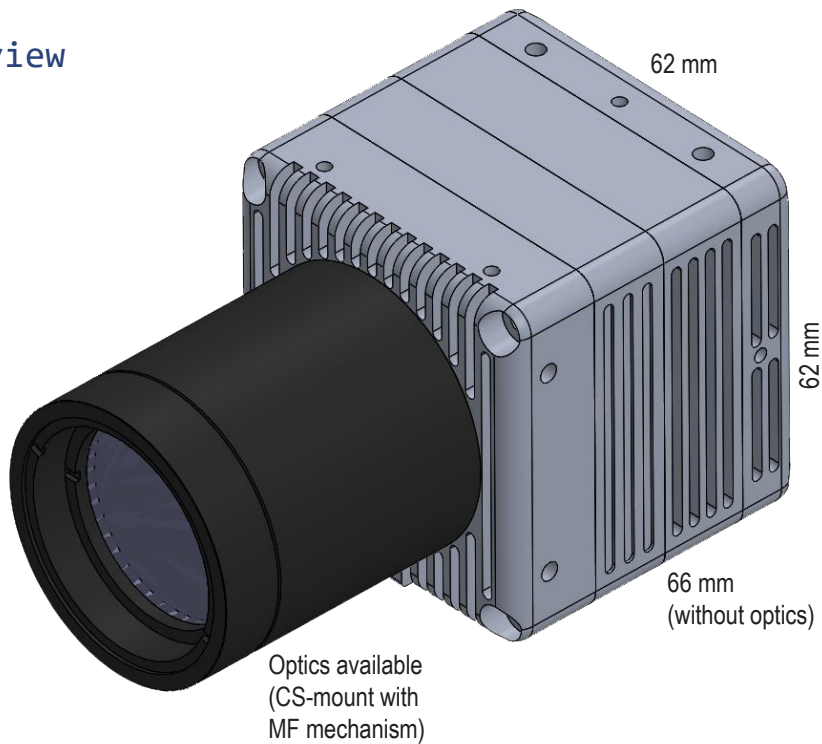
**Fire detection**

Pyramid Imaging  
945 E. 11th Ave  
Tampa, FL 33605  
sales@pyramidimaging.com  
https://pyramidimaging.com

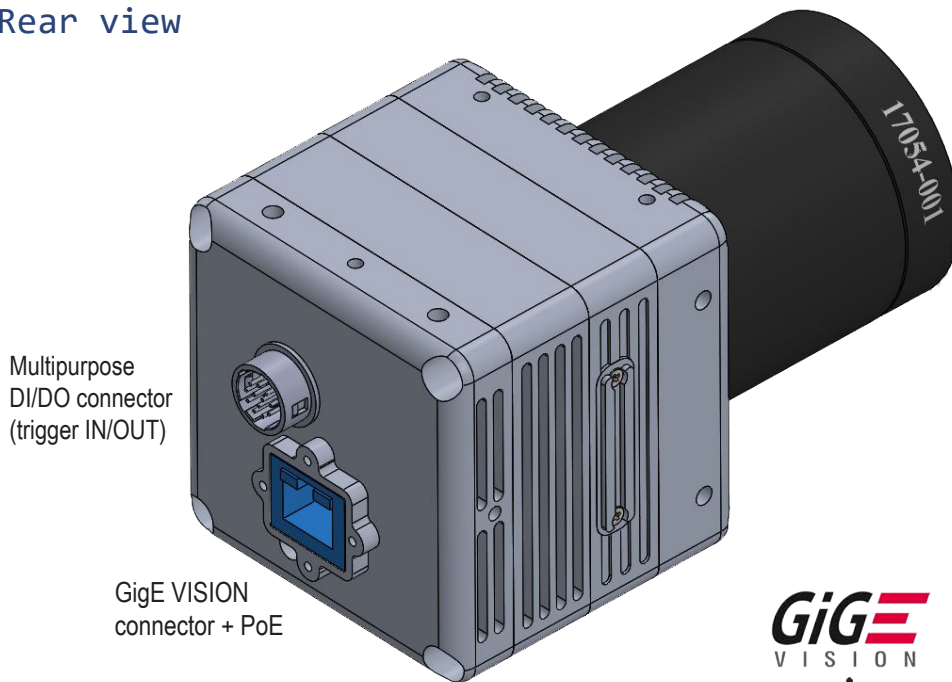


# TACHYON 16k CAMERA

Front view



Rear view



## Main facts

- ▶ Maximum added value and affordability
- ▶ Miniaturized compact size to ensure a full integration in the Industry 4.0 applications and Factories of the Future production lines

## Typical applications

- ▶ Additive manufacturing
- ▶ Industrial process monitoring
- ▶ Machine vision
- ▶ Gas and flame detection
- ▶ Spectroscopy
- ▶ Glass manufacturing quality assurance
- ▶ R+D
- ▶ UAV

## Industries of use

- ▶ Automotive industry
- ▶ Home appliance manufacturing
- ▶ Metallurgy and steel industry
- ▶ Petrochemical industry
- ▶ Glass manufacturing industry



Pyramid Imaging  
945 E. 11th Ave  
Tampa, FL 33605  
sales@pyramidimaging.com  
https://pyramidimaging.com

