

# 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

- ▶ 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
  - ▶ Trigger in / out
- ▶ Frame rate: 2000 images per second (maximum), interlaced acquisition
- ▶ Start-up time: < 10 seconds
- ▶ Power supply: PoE, 8 W (non-PoE operation requires 12 VDC)
- ▶ Metal housing with CS-mount optics interface, rear connectors, and tripod, M3 and M4 screw holes
- ▶ 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
- ▶ Dimensions (in mm) (without lens): 66 (L) x 62 (W) x 62 (H)
- ▶ Mechanical shutter for 1-pt offset correction
- ▶ 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



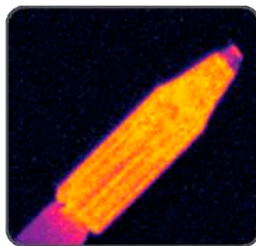
**GIG** VISION GEN*i*CAM



**Additive manufacturing monitoring**



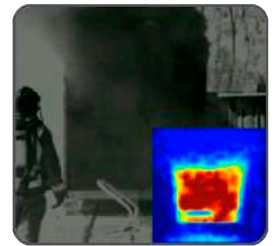
**Manufacturing process control**



**Machine vision applications**



**Gas and spectroscopy**



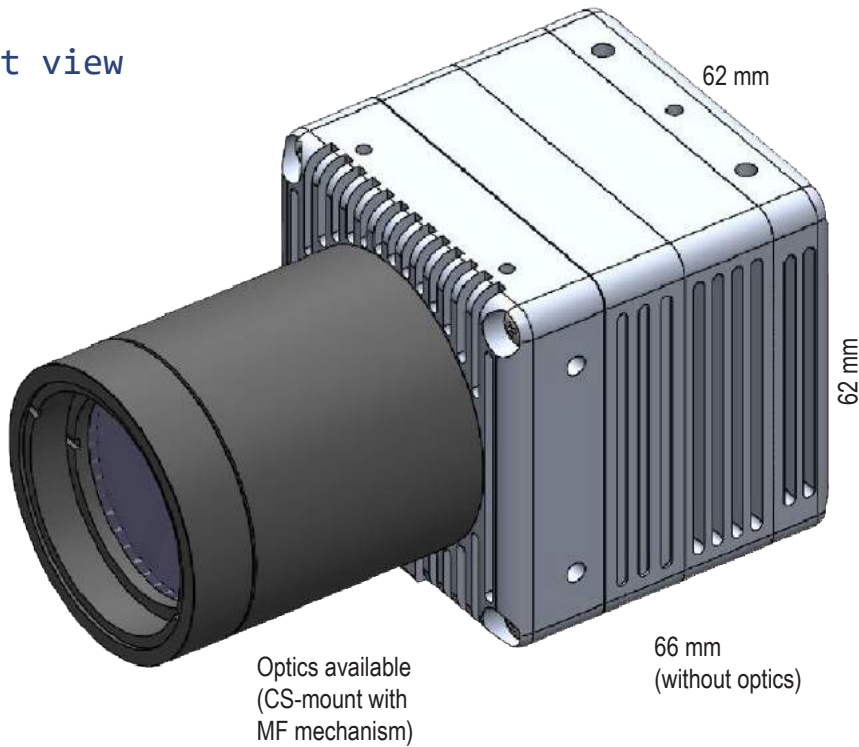
**Fire detection**

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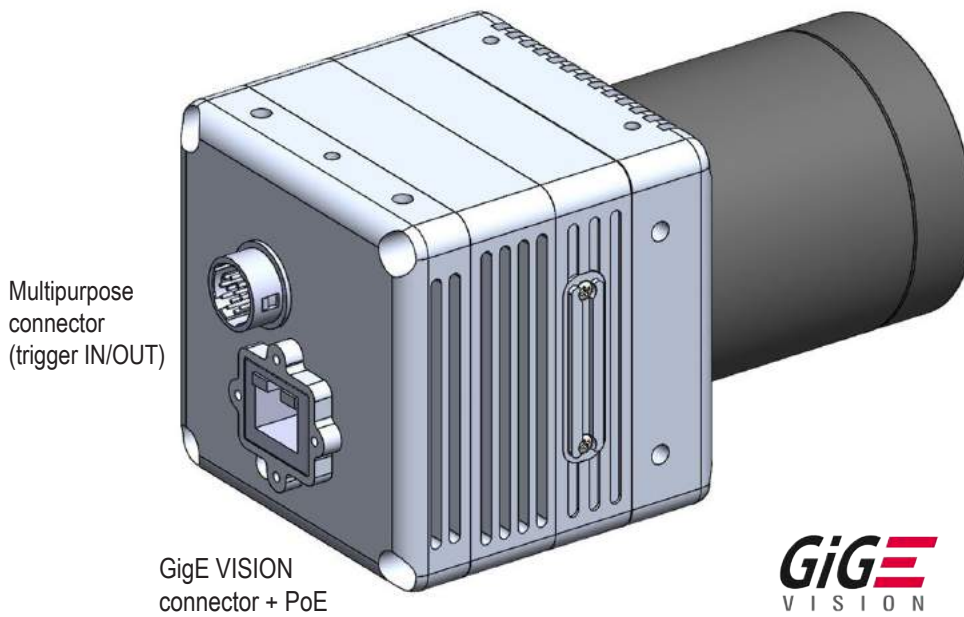
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# TACHYON 16k CAMERA

## 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

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