TACHYON 16k CAMERA &
TACHYON 16k CAMERA PLUS

Uncooled MWIR 128x128 pixels infrared camera with high-speed frame rates up to 4000 frames 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 μm x 50 μm (square format)
- Spectral range: MWIR, 1.0 μm to 5.0 μm
- Peak wavelength of detection: 3.7 microns
- Integration time: 10 - 1000 μs, selectable
- Raw data communication, 14 bit
- Interfaces:
  - GigE VISION 2.0 (GenICam compatible) with PoE
  - Multipurpose DI/DO connector (trigger IN/OUT) (cable sold separately)
  - Maximum frame rate: 4000 fps (TACHYON 16k CAMERA PLUS) (see table)
  - ROI windowing function (see table for full description of possible modes)
  - 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 (w/o optics): 66 (L) x 62 (W) x 62 (H) (mm), 400 grams
- Optics (standard option): f=35 mm, F#1.1, FoV 10.5° x 10.5°, AR coating (1 - 5 μm), manual focus with CS-mount interface
- Software included:
  - NIT SOFTWARE SUITE (Acquisition and visualization SW)
  - SDK available 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
TACHYON 16k CAMERA & TACHYON 16k CAMERA PLUS

Main specifications

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<td>2000 frames per second @ 128×128</td>
<td>4000 frames per second @ 128×128</td>
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<td>Allows higher frame rates using embedded</td>
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<td>ROI windowing functions</td>
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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

Industries of use

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

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