## TACHYON 16k CAMERA

## Uncooled MWIR $128 \times 128$ pixels infrared camera with high-speed frame

 rates up to 2000 images per secondMaximum added value and afordability to ensure a full integration in the INDUSTRY 4.0 applications

- Detector type: VPD PbSe FPA with digital interface, uncooled operation
- Array format: $128 \times 128$ (16384 pixels)
- Pixel size: 50 um $\times 50$ um (square format)
- Spectral range: MWIR, 1.0 um to 5.0 um
- Peak wavelength of detection: 3.7 microns
- Integration time: 10-1000 $\mu \mathrm{s}$, 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): $66(\mathrm{~L}) \times 62(\mathrm{~W}) \times 62(\mathrm{H})(\mathrm{mm}), 400$ grams
- CS-mount optics interface, optics available:
- $10.5^{\circ} \times 10.5^{\circ}$, f/1.1, 35 mm , manual focus (standard option)
- $15.2^{\circ} \times 15.2^{\circ}$, f/ $1.2,24 \mathrm{~mm}$, manual focus
- Software included:
- NIT SOFTWARE SUITE (Acquisition and visualization SW)
- GenICam compatible for custom software programming
- Minimum temperature of detection: $100^{\circ} \mathrm{C}$
- 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

## TACHYON 16k CAMERA



Rear view

Multipurpose DI/DO connector (trigger $\operatorname{IN} / O U T$ )


## 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

