

PULSATRIX CAMERA

DIGITAL NIGHT VISION TO THE LIMIT

Image intensifier based
Ultra sensitive
Wide dynamic range (140dB)
High frame rates (<100 Hz)
High level tube protection
PAL or 1280x1024 HDSI output



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Pulsatrix Camera is the number one choice for photon starved applications where high quality video is demanded. It is a complete camera with PAL or HD-SDI output and lens control. At night, during the darkest conditions, the military-standard image intensifier amplifies the little light which is available to deliver video of high contrast and rich in detail. Even at starlight conditions the camera does not introduce motion blur. There is no temporal integration nor high exposure times. Pulsatrix Camera is small and features a low power consumption.

See the unseen! Best in class!

Key features

- Ultra sensitive night time operation
- Integrated video processing
- Small form factor, low power consumption

Applications

- Vehicle situational awareness
- Driver visual enhancement
- Midlife upgrades and retrofits
- Observation, security and surveillance



ITS

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NIGHT VISION THERMAL IMAGING CAMERA DEVELOPMENT

EXTRAORDINARY CAMERA SYSTEMS

PULSATRIX CAMERA

DIGITAL NIGHT VISION TO THE LIMIT

System basics

Type	Image Intensifier based, monochrome, high sensitive Camera
Sensor	WDR CMOS
Image intensifier	Photonis XR5 (other types on request)
Resolution	1280x1024 HD-SDI or PAL 720 x 576 (interlaced)
Dynamic range	Ultra-high dynamic range: 140 dB, high contrast
Spectral range	400 – 1000 nm
Frame rate	Digital: max 100 Hz; Analog: PAL 25 Hz
Detection limit	<1 μ Lux @ 2850 K, full frame rate
EBI (equivalent background illumination)	<0,25 μ Lux
Image intensifier control	Closed loop, integrated digital control
Lens mount, optical format,	C-mount, 1 inch, (18 mm)

Input and output

Output	BNC, analog PAL video or HDSDI (BT 1120)
Input	BNC analog PAL video form secondary (daytime) camera for a hybrid 24/7 camera system (acts also as light sensor to preserve/protect sensitivity of Image intensifier)
Interface	USB 3.0 (for settings only)
Lens control	4 pin DC iris control

Features

Image enhancement	Powerful, FPGA based, digital image enhancement: anti-blooming, noise reduction, image sharpening, contrast enhancement, etc. ShadowBoost™ for improved visibility of dark areas
Image intensifier protection	Closed loop image intensifier control to preserve sensitivity and contrast Protected with ITS' Virtual Iris™ technology
Overlay	E.g. reticule, bearing, range, etc.

Physical dimensions

Size and weight (Pulsatrix Camera)	Diameter: 71 mm; height: 66mm; Length: 88 mm body, 104.43 mm with connectors; Weight: 506 gram (without lens)
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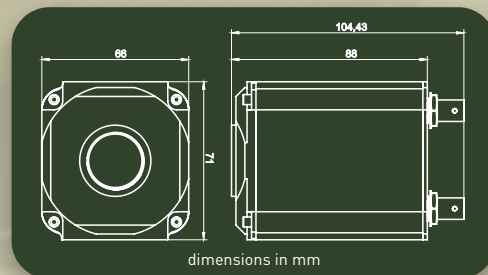
Power

Input voltage	5 Volt DC, 2 Watt
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Environmental parameters

Operating and storage temperature	-20°C to +60°C, -35°C to +60°C
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ITS offers full technical and mechanical support
Other output formats and connectors on request



Designs and specifications are subject to change without notice.

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