PULSATRIX CORE

DIGITAL NIGHT VISION TO THE LIMIT

Image intensified, ultra sensitive, high dynamic range camera core

NEW DEVELOPMENT !
True Night Vision camera core !

! INNOVATION
Innovative Night Vision camera core

No compromises, just top quality video

Applicable for very dark environments

Best-in-class video at night

Easy to operate

Pulsatrix Core is the number one choice for photon starved applications where high quality video is demanded. Specially designed for system integrators to be used as component in a camera system. 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 by starlight the core does not introduce motion blur. There is no temporal integration nor high exposure times. Pulsatrix Core is small and features a low power consumption.
See the unseen! Best in class!

Key features

- Ultra sensitive night time operation
- Military quality night vision capabilities
- Small form factor, low power consumption

Applications

- Security and surveillance
- UAVs
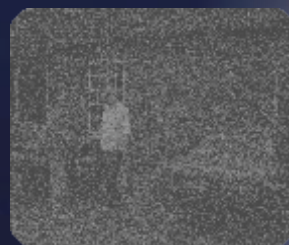- Criminal investigation

BREAKTHROUGH !
Best-in-Class camera core with the sensitivity of night vision goggles !

'normal'
camera

non ITS reference
sensitive
surveillance camera

non ITS reference
state-of-the-art
EMCCD camera

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System basics

Type	Image Intensifier based, monochrome, high sensitive camera
Sensor	WDR CMOS
Image intensifier	Photonis XR5 (other types on request)
Resolution	1280x1024 8 bit digital output and PAL 720 x 576 (interlaced)
Dynamic range	Ultra-high dynamic range: 140 dB, high contrast
Spectral range	400 – 1000 nm
Framerate	Digital: max 100 Hz; Analog: PAL 25 Hz
Detection limit	<1 µLux @ 2850 K, full framerate
EBI (equivalent background illumination)	<0,25 µLux
Image intensifier control	Closed loop, integrated digital control
Optial format	1 inch, 18 mm diagonal

Input and output

Connector (I/O)	Hirose DF12 connector
Output	PAL analog video and BT.656 b bit, LVDS and LV-CMOS
Interface	Asynchronous serial interface (for settings)

Features

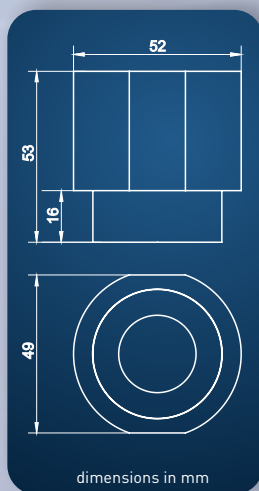|	
Image enhancement	Powerful, FPGA based, digital image enhancement: anti-blooming, noise reduction, image sharpening, contrast enhancement, etc.
Image intensifier protection	Closed loop image intensifier control to preserve sensitivity and contrast Protected with ITS' **Virtual Iris™** technology
Lens mount	C-mount, 1 inch optical format

Physical dimensions

Size and weight (Pulsatrix Camera)	diameter: 52 mm; length: 53 mm; 166 gram

Power

Input voltage	5 Volt DC, 2 Watt

Environmental parameters

Operating and storage temperature	-20°C to +60°C, -35°C to +60°C
Shock	75 g – 6 ms

	ITS offers full technical and mechanical support Output formats and connectors on request

dimensions in mm

Desings and specifications are subject to change without notice.

ITS

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NIGHT VISION   THERMAL IMAGING   CAMERA DEVELOPMENT