

PULSATRIX CAMERA

DIGITAL NIGHT VISION TO THE LIMIT

Image intensified, ultra sensitive,
high dynamic range camera

! INNOVATION
! Innovative Night Vision camera

NEW DEVELOPMENT !
True Night Vision Video !

No compromises, just top quality video

Applicable for very dark environments

Best-in-class video at night

Easy to operate



Pulsatrix Camera is the number one choice for photon starved applications where high quality video is demanded. It is a complete camera with an analog PAL output. 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 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
- Military quality night vision capabilities
- Small form factor, low power consumption

Applications

- Security and surveillance
- UAVs
- Criminal investigation

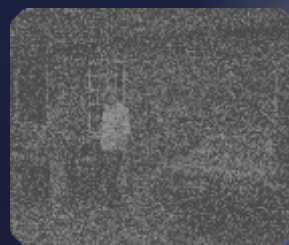
BREAKTHROUGH !
Best-in-Class camera with the
sensitivity of night vision goggles



'normal'
camera



non ITS reference
sensitive
surveillance camera



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



PULSATRIX
CAMERA

ITS

Innovative Technical Solutions BV

Richterlaan 3C
9207 JT Drachten
The Netherlands

URL: www.its-hightech.nl
Tel: +31 (0) 512 212410
Email: info@its-hightech.nl

NIGHT VISION THERMAL IMAGING CAMERA DEVELOPMENT

System basics

Type	Image Intensifier based, monochrome, high sensitive camera
Sensor	WDR CMOS
Image intensifier	Photonis XR5 (other types on request)
Resolution	PAL 720 x 576 (interlaced)
Dynamic range	Ultra-high dynamic range: 140 dB, high contrast
Spectral range	400 – 1000 nm
Framerate	25 frames/sec
Detection limit	<1 µLux @ 2850 K, full framerate
EBI (equivalent background illumination)	<0,25 µLux
Image intensifier control	Closed loop, integrated digital control

Input and output

Output	BNC, analog PAL video
Input (Rome unit)	BNC, analog PAL video from a CCTV camera (acts as a daylight sensor to preserve sensitivity) enabling hybrid 24/7 operation

Communications, lens control	USB 3.0 (for settings only), 4-pin DC iris control
------------------------------	--

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

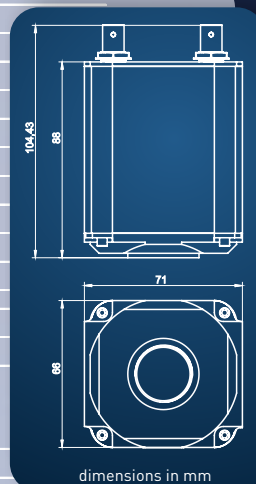
Size and weight (Pulsatrix Camera)	diameter: 71 mm; height: 66mm; length: 88 mm body, 104,43mm with connectors; 506 gram (without lens)
------------------------------------	--

Power

Input voltage	9-24 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



	Pulsatrix Camera 50	Pulsatrix Camera 75	Pulsatrix Camera 300	Pulsatrix 24/7 Camera KIT
Pulsatrix Camera, Photonis XR5 image intensifier	✓	✓	✓	✓
night vision compatible lens, 50mm, f/1.8, DC-iris	✓			
night vision compatible lens, 75mm, f/1.8, DC-iris		✓		
night vision compatible 25-300mm motorized zoom lens, f/2.8			✓	✓
camera/lens bracket			✓	
Amsterdam add-on unit (option), sensor, switch camera on/off	✓	✓	✓	
nighttime operation	✓	✓	✓	✓
nighttime and daytime operation in hybrid configuration				✓
Berlin unit, zoom/focus lens control unit			✓	✓
Bosch NBN-63013-B Dinion IP Starlight 6000 HD, D/N, HDR				✓
4,5-165mm motorized zoom lens, f/1.8 (for Bosch camera)				✓
camera/lens bracket for two cameras + lenses				✓
Rome unit, hybrid configuration camera connection and control				✓
Pelicans with foam				✓

Designs and specifications are subject to change without notice.