

EO / IR / LRF / AI

ISR140

Vertigo™



DESCRIPTION

Introducing the ISR140, a cutting-edge 2-axis camera gimbal, specifically engineered to enhance the success of your ISR missions. This compact device offers unrivaled mechanical stabilization and the market's most advanced onboard AI. Experience effortless control, remarkable 30x optical zoom, and superior FullHD 1080p imagery. The ISR140 is more than a camera gimbal—it's your indispensable ally for insightful, precise, and intelligent ISR operations.

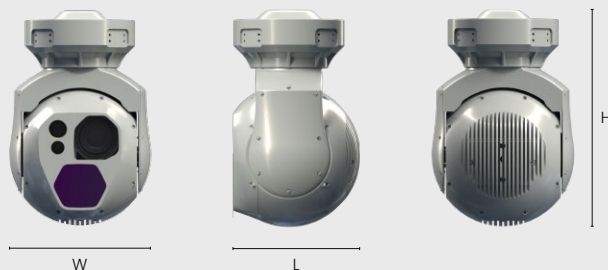
BASIC INFO

Product type Multisensor Surveillance System

Product code Y1237/ICPB

Dimensions W: 140 mm / L: 125 mm / H: 212 mm

Equipped with modules from



KEY FEATURES

Latest Image Processor
1080p 60fps live onboard image processing

TOP quality thermal Imager
Up to 120fps, super image quality

Non-itar
Fast and easy export

Artillery Support
Precise target geolocation

Customization
Friendly system integration support

Reliable operation
Years of experience

IP 64 casing
Enviromantally protected, dry gas sealed structure

Direct drive
HQ brushless motors, unique innovative driver algorithm

AI onboard
40x faster AI computing than competition

Gps/ins integration
Easy to use precise location data

Interactive API
Suite of interactive parameters ready to use



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SPECIFICATION

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System Overview

Mechanical stabilization	2 axis stabilized
Angular vibration range	Pitch, Roll i Yaw $\pm 0.01^\circ$
Mechanical range	Pitch: $\pm 90^\circ$ Roll: $\pm 45^\circ$ Yaw: 360° unlimited
Maximum controllable speed	120°/s
Weight	1,95 kg
Size	140mm x 125mm x 212mm
Environmental protection	IP64, Dry gas sealed enclosure
Operating temperature	-20°C to +55°C
Voltage	11-26 V
Power consumption	30W, max 60W
Video output	Ethernet - H.264 or H.265
Control interface	RS232, Ethernet, PWM, PPM, S-Bus, Serial

Continuous Zoom Lens for Thermal Imager (Upgrade)

Lens	15-75mm
F/#	1.2
FOV	HFOV 43.4° - NFOV 8.2°
Zoom Time (NFOV to WFOV)	≤ 5.5 sec.
Focus Time (minimum range to ∞)	≤ 1 sec.
Focus mechanism	Motorized

Color HD Zoom Camera

Sensor	1/2.8" EXMOR CMOS, wide dynamic, low noise
Optical zoom	30x, F = 4.3 – F = 129mm
Digital zoom	12x digital zoom
FOV	63.7°(Wide) - 2.3°(Tele)
Resolution	FullHD 1080p (1920x1080px) up to 60 Hz

Laser Range Finder

Maximum range	5 100m
Range Accuracy (1 σ)	± 0.75 m
Repetition rates	Max. 2Hz
Multiple target detection	up to 3 targets
Wavelength	1550 nm
Eye safety per IEC 60825-1	Laser Class 1

Thermal Imager

Type	LWIR uncooled bolometric FPA
Sensor	Lynred® 640 x 480px
Standard Lens	35mm
Standard Lens FOV	HFOV 26°
Sensitivity	50<mK – 25<mK
Frame rate	30 Hz (up to 120 Hz)

Laser Range Finder

Video output	1080p, 720p (multistream EO+IR)
H.264, H.265 encoding	Yes
Picture in picture	Yes
Digital stabilization	Yes
Object tracking	Yes
Image enhancement	Yes
Video recording and snapshots	256 GB (up to 2TB)
Target detection and tracking	Yes
On screen display	Yes
AI algorithm onboard	Yes, 2ITOPS

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Color HD Zoom Camera



Human target
[1,7x0,5m]



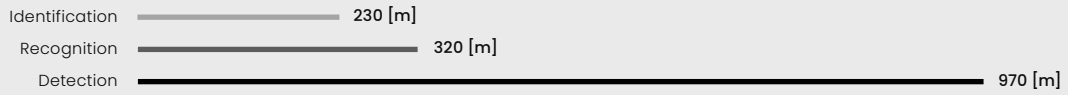
NATO target
[2,3x2,3m]



Thermal Imager –
Std. 35mm fixed lens



Human target
[1,7x0,5m]



NATO target
[2,3x2,3m]



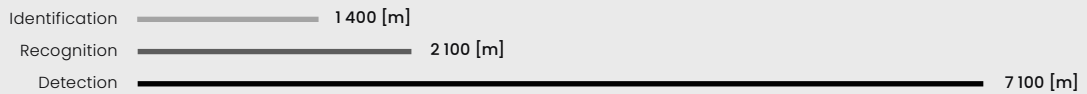
Thermal Imager –
Upgrade 15–75mm zoom lens



Human target
[1,7x0,5m]



NATO target
[2,3x2,3m]



RANGE FINDER PERFORMANCE

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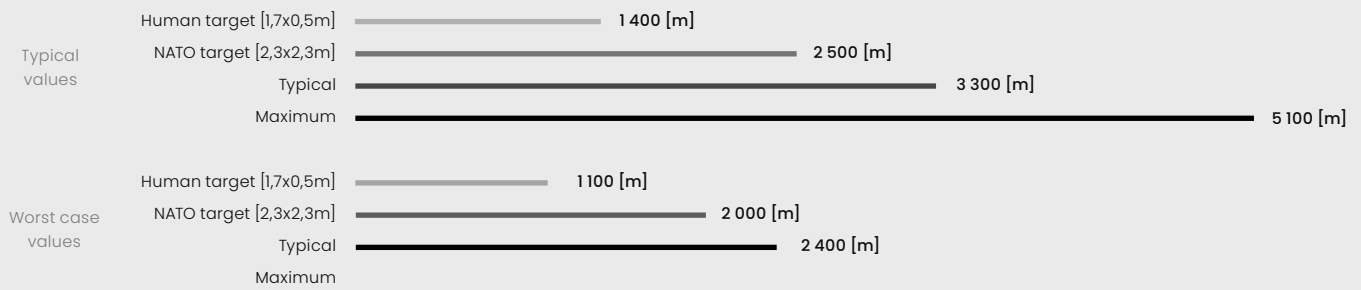
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