





INNOVATION FOR A STRONGER, SAFER TOMORROW

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#### About us

#### Discover S4E: Pioneers in Electro Optics

At S4E, innovation is our core strength, rooted in over three decades of dedicated pursuit of excellence. Our journey, initiated by a Padmashri Nominee, reflects a commitment to pushing the boundaries of technology. We are proud to introduce you to our story:

- Unprecedented Precision: Our state-of-the-art Nano Machining facility in India sets industry standards. With a focus on mechanical components boasting an astonishing 1-micron tolerance and optical elements featuring an exquisite 3 nm surface finish, we redefine precision engineering.
- Stellar Space Contributions: We've played a pivotal role in space exploration with our groundbreaking technology and processes for crafting large telescopic mirrors, as showcased in the MACE PROJECT.
- Innovative Patents: With four patents in Electro Optics already secured and three more in the pipeline, our commitment to intellectual property and innovation is unwavering.
- Expanding Horizons: Our vision extends beyond Electro Optics. We've embarked on an exciting journey, developing lightweight Drone Cameras, cutting-edge Counter Drone systems, and VTOL technologies through the "Make in India" initiative. These endeavors reinforce our confidence in our capabilities.

S4E is more than just a company; we are the architects of the future. Join us on this exciting journey because, for us, the story has only just begun.

Welcome to the future with S4E – Where Innovation Knows No Bounds.





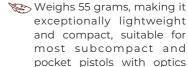
The PRM 25, has an exceptional lightweight and compact profile and excels in rapid shooting and hitting moving targets, making it a favoured choice. Its micro-reflex sight design perfectly complements quick and agile shooting needs.

#### **Features**

( It has three MOA dot sizes with 8 levels and two Night Vision (NV) red dot intensities.



Complete dust and waterproof with ingress protection of IP 67.



compatibility.

ரு Fit for real caliber and excellent for Rapid Shooting and moving targets.



It works on a CR2032 cell with 10000 hours battery runtime









SI	PECIFICATIONS
Window Lens Size	25x18mm
Length	46mm
Width	30mm
Height	26mm
Weight (net)	55gm
Eye Relief	Free
Optical Coating	Multi Coated
Parallax	Parallax Free
Elevation Range	45 MOA
Windage Range	45 MOA
Material	High quality aluminum alloy in black matte finish
Dot Size	3 MOA
Dot Intensity	8 Levels and 2NV Red Dot
Battery Type	CR2032
Run Time	10,000Hrs.
Environment Std.	MIL STD 810G.

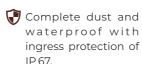




The **PR 100**, has an exceptional lightweight and compact profile and excels in rapid shooting and hitting moving targets, making it a favoured choice. Its an advanced reflex sight that perfectly complements quick and agile shooting needs.

#### **Features**

It has three MOA dot sizes with 11 levels of red dot intensity to enhance vision in both clear and adverse light conditions.



Military-grade (6061-T6) aluminum alloy body housing with a matte black finish.

Allows users to adapt the sight to various lighting conditions for optimal aiming precision.



 Fit for a real caliber and ideal for quick shooting and moving targets.







## PR 100

S	PECIFICATIONS
Objective Lens	22 mm
Length	73.50 mm
Width	43 mm
Height	58 mm ( with mount )
Eye Relief	Free
Optical Coating	Multi Coating
Parallax	3 MOA
Elevation	60 MOA ( per click 1 Moa )
Windage	60 MOA (w)
Material	High quality aluminum in black matte
Environmental STD	MIL STD 810G
Dot Size	3 MOA
Dot Intensity	11 Levels
Buffer Type	CR 2032
Run Time	10, 000 Hrs
Environmental STD	MIL STD 810 G

PS: Customized versions available on request. Patent application under process.





High-Performance Telescopic Sight with 4X/5X Optical Magnification.

Ap37 / AP37-C is a durable, lightweight telescopic sights with 4X/5X magnifications, it can be easily mounted on a weapon and is capable of engaging targets at great distances.

#### **Features**



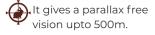
It has an optical magnification range of 4X/5X.



11 Levels of reticle illumination intensity.



It includes Etched Glass Reticle.





It weigh less than 500 grams.







# AP 37 TELESCOPIC SIGHT 4X / 5X

SPECIFICATIONS	
Optical Magnification	4X/5X
Field of View	4.5°
White Light Transmission	80%
Exit Pupil Diameter	8mm
Dioptre Adjustment	-3D to +2D
Parallax	Parallax Free up to 500m
Reticle Pattern	MIL STD 1913
Single Human Target Range	≥ 500m
Battery	CR 2032
Operational hours	≥ 100hours
Length	≤ 160mm
Weight	≤ 500grams
Colour	Non Reflective Black
Environmental	MIL STD 810-G
Service Life	10 years

PS: Customized versions available on request. Patent No.: 330974-001







High-Performance Telescopic Sight with 5-25X Magnification DHRISTI series is an upgraded version of the AP series and features an etched glass reticle design. With 5-25x zoom-in features and excellent variable magnification, this sight is highly versatile.

#### **Features**



Excellent changeable magnification is a feature of the 5x-25x zoom-in feature.



Field of view upto 7.5-1.5 meters at 100 meters.



Eye distance from eyepiece is constant of 100mm.



Ingress protection of IP67





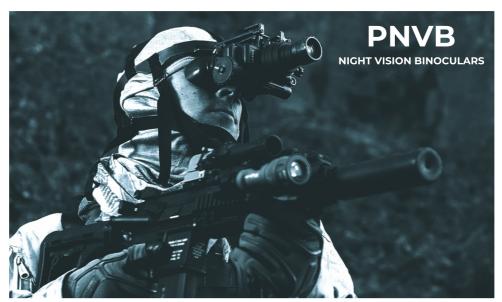


## DHRISTI AP 5-25X

**TELESCOPIC SIGHT** 

SPECIFIC	ATIONS
Magnification	5-25x
Objective Lens	56mm
Optical Diameter	39mm
Optical Length	53mm
Exit Pupil	8.0-2.2mm
Optical Coating	Fully Multi Coated
Tube Diameter	30mm monotube
Field of View	7.5-1.5 meters @100 meters
Eye Relief	Constant 4" / 100mm
Length	365mm / 14.4"
Weight	670g
Parallax	14m to Infinity
Click Value	1/10MIL
Elevation Range	18.5MIL
Windage Range	18.5MIL
Reticle	Etched glass
Illumination	6 levels
Material	Black Anodised Aluminum
Battery Type	CR2032
Environmental Standard	MIL STD 810G
Diopter compensation ( Eyepiece )	Fast-focus eyepiece (+2D to -3D)

PS: Customized versions available on request.
Patent application under process.





Passive Night Vision Binocular equipped with a Gen II or Gen III (II tube) image intensifier, designed to seamlessly operate in highly challenging low-light environments. Its adaptability and performance make it a valuable asset for military applications, ensuring optimal visibility in extreme low-light conditions.

#### **Features**



It is equipped with Gen II or Gen III Image Intensifier Tubes.



A F1.2, 25.8mm lens system is used.



The binocular has rubber winged eye cups.



It is a lightweight, 400 gm night vision binocular, making it very convenient to carry.



This binocular can be used with a head mount or hands-free.

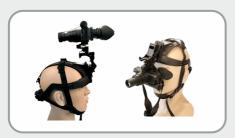




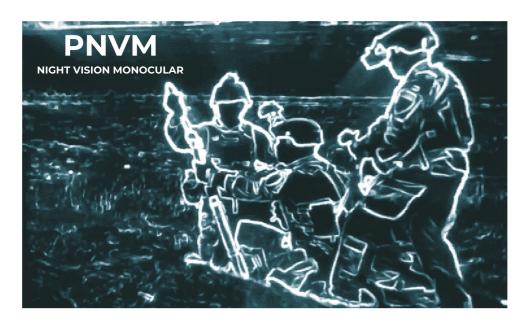


# PNVB NIGHT VISION BINOCULAR

SPE	CIFICATIONS
Туре	II Tube Based Night vision device
Magnification (Options)	1X / 3X / 4X / 5X / 6X
Lens	Glass
Focus Range	0.25m to infinity
IIT ( Options )	Gen II and Gen III
Resolution (lp/mm)	43-52 ( Gen2 ) 64-72 ( Gen3 )
Field of view (deg)	40°
Focal Length	25mm
Diopeter	+5/-5
Dimensions (mm) L x W x H	149x121x51
Weight (g)	400
Battery type ( v )	CR123A (1)
Environmental Standard	MIL STD 810G
Operating Temperature	-50°C / +60°C









Passive Night Vision Monocular equipped with a Gen II or Gen III (II tube) image intensifier, designed to seamlessly operate in highly challenging low-light environments. Its adaptability and performance make it a valuable asset for military applications, ensuring optimal visibility in extreme low-light conditions

#### **Features**



Tt has an IR illuminator and a low battery indicator.



It provides a field of view upto 10 degree with error of 1 degree.



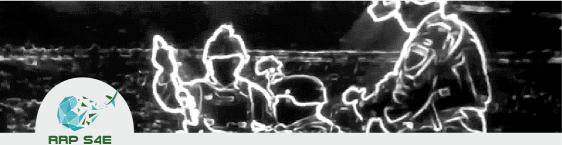
The device eye relief is upto 24mm.



It is equipped with Gen II or Gen III Image Intensifier tubes.



This monocular can be used with a head mount or hands-free.







## **PNVM**NIGHT VISION MONOCULAR

ELECTRO-MECHANICAL CHARACTERIS	
Weight	900 grams (+/-50 grams)
Power source	CR 123A
Operating time	More than 15 hours
Start up time	<1 sec
Dimensions	250 x 75 x 130
Ingress Protection	IP 67
Low battery and IR Indicator	Yes
Operating temperature	-40° to +50°C
High Light Cut off	Yes
Packaging	Hard Case

IMAGING CHARACTERISTICS	
Image Intensifier Tube	Gen II / III
Resolution	64 lp/mm
SNR	22
Magnification	1x - 6x
Field Of View	10 Degree +/- 1 Degree
Range of Focus	5 m to infinity
Interpupillary Distance	Yes, 55 -71 mm
Eye relief	24mm
Diopter	+2 to -5D
Dimensions (mm) L x W x H	144 x 69 x 63
Focal Length	25mm
Environmental STD	MIL STD 810 G

PS: Gen II / II + to attain F.O.M. of 1400 Gen III / III + to attain F.O.M. higher than 1400





Experience tactical superiority by ensuring precise target identification. Benefit from compact design, reduced power consumption, seamless integration, and superior thermal imaging, enhancing situational awareness on the field.

#### **Features**



Uncooled sensor technology



Customizable detection range up to 2000 meters



Compact and lightweight design



Reduced power consumption for extended missions



Seamless integration with various weapon sight systems







UNCOOLED LWIR IR CORE

#### \* UNDER JOINT DEVELOPMENT WITH ACADEMIA INSTITUTION

Detector Type       Uncooled Microthermal Vox FPA; 640 x 512; 17μm         N.E.T.D       ≤40mK@30°C, #F1.0         Wave Range       8-14μm         Spatial Resolution       0.89mrad (19mm Athemalized Lens)         FOV/Minimum Focus Distance       31° x25°/1m(19mm)         Interface       J30J-9(Default)         Power Supply       DC 3-10V         Analog Output       Combined: PAL@50Hz (NTSC@60Hz Optional)         Digital Output       Customized         Control       RS232(Default), RS485, RS422(Customize)         Focus       Support Two Focus Control Output,≤10V≤500mA         Power Consumption       ≤2W(Static)         Start Up Time       ≤20s         Lens       13mm: 45°x37° / 19mm: 31° x 25°, and all standard. lenses         Detection - 760m       Recognition - 190m         Identification - 95m       ≤70g, Without Lens         Size       ≤33mm(W) x 32mm(H) x 48mm(L), Without Lens	SP	ECIFICATIONS
Wave Range 8-14μm  Spatial Resolution 0.89mrad (19mm Athemalized Lens)  FOV/Minimum Focus Distance 31° x25°/1m(19mm)  Interface J30J-9(Default)  Power Supply DC 3-10V  Analog Output Combined: PAL@50Hz (NTSC@60Hz Optional)  Digital Output Customized  Control RS232(Default), RS485, RS422(Customize)  Focus Support Two Focus Control Output,≤10V≤500mA  Power Consumption ≤2W(Static)  Start Up Time ≤20s  Lens 13mm: 45°x37° / 19mm: 31° x 25°, and all standard. lenses  Detection - 760m  Range ( For 19mm Lens )  Recognition - 190m  Identification - 95m  Weight ≤70g, Without Lens	Detector Type	Uncooled Microthermal Vox FPA; 640 x 512; 17µm
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FOV/Minimum Focus Distance  Interface  J30J-9(Default)  Power Supply  DC 3-10V  Analog Output  Combined: PAL@50Hz (NTSC@60Hz Optional)  Digital Output  Control  RS232(Default), RS485, RS422(Customize)  Focus  Support Two Focus Control Output,≤10V≤500mA  Power Consumption  ≤2W(Static)  Start Up Time  ≤20s  Lens  13mm: 45°x37° / 19mm: 31° x 25°, and all standard. lenses  Detection - 760m  Range ( For 19mm Lens )  Recognition - 190m  Identification - 95m  Weight  ≤70g, Without Lens	Wave Range	8-14µm
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Control RS232(Default), RS485, RS422(Customize)  Focus Support Two Focus Control Output,≤10V≤500mA  Power Consumption ≤2W(Static)  Start Up Time ≤20s  Lens 13mm: 45°x37° / 19mm: 31° x 25°, and all standard. lenses  Detection - 760m  Range (For 19mm Lens) Recognition - 190m  Identification - 95m  Weight ≤70g, Without Lens	Analog Output	Combined: PAL@50Hz (NTSC@60Hz Optional)
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Detection - 760m  Range ( For 19mm Lens )  Recognition - 190m  Identification - 95m  Weight  ≤70g, Without Lens	Start Up Time	≤20s
Range ( For 19mm Lens )  Recognition - 190m  Identification - 95m  ✓ 70g, Without Lens	Lens	13mm: 45°x37° / 19mm: 31° x 25°, and all standard. lenses
Identification - 95m  Weight ≤70g, Without Lens	Range ( For 19mm Lens )	Detection - 760m
Weight ≤70g, Without Lens		Recognition - 190m
		Identification - 95m
Size ≤33mm(W) x 32mm(H) x 48mm(L), Without Lens	Weight	≤70g, Without Lens
	Size	≤33mm(W) x 32mm(H) x 48mm(L), Without Lens

P.S: Product can be customized to get better DRI values. Detection not to extend beyond 2000 mtrs.





The PR110 MF is a sophisticated, yet user-friendly, and portable handheld thermal imager that is perfect for ground applications due to its ease of use and maintenance. It has the ability to see through fog, smoke, and darkness, making it a valuable tool for a wide range of activities.

#### **Features**

- It has an HD low-light CMOS detector with a 1920x1080 resolution.
- The sight meets the requirements of MIL-STD JSS-55555.
- It is equipped with an uncooled microbolometer with a 640x512 resolution.

X6, and X8.

The battery has a runtime of more than 6

hours

Digital zoom of X2, X4, GPS measurement accuracy is within 3m, however com-pass measurement accuracy is less than 2 degrees.









### **PR 110MF** HANDHELD THERMAL IMAGER

THERMAL DETECTOR	
Detector Type	Uncooled Microbolometer
Detector Resolution	640 x 512
NETD	≤ 30mk
Pixel Pitch	12µm
Spectral Range	8-14µm
Frame Rate	50Hz

LOW-LIGHT CMOS DETECTOR	
Detector Type	HD Color CMOS
Detector Resolution	1920 x 1080
Pixel Pitch	3.5µm
Frame Rate	50Hz

Frame Rate	50Hz	
	OPTICS	
Thermal Lens	75mm F1.0	
FOV	5.9° x 4.4°	
Visible Light Lens	4.7mm - 47mm Optical Zoom	
Detection Range	3.6km (Human) / 7.2km(Vehicle)	
IMAGE PROCESSING		
Digital Zoom	X2 X4 X6 X8	
Display	OLED 1024 x 768	
Image Enhancement	DDE	
Image Correction	Non-uniformity Correction	
Polarity	Whitehot / Blackhot / Digital Night Vision/	

Multiple Palettes





PR82 is a Thermal Night Vision Scope that features 17-micron 640 x 480 thermal sensors, providing exceptional image clarity and extended detection ranges.

#### **Features**



It has 4X digital zoom capability.



It has a 800x600 OLED resolution



It has equipped with an uncooled A-Si 17 micron sensor with a 640x480 resolution.



The sight meets the requirements of MIL-STD JSS-55555.



Customizable with 35mm, 50mm, and 75mm lens



The battery has a runtime of more than 6 hours.







## PR82 THERMAL SIGHT 17µm

#### \* THERMAL CORE DEVELOPMENT IN COLLABORATION WITH ACADEMIA INSTITUTION

SPECIFICATIONS		
Sensor	A-Si, 17µm, 640 x 480	
Detector sensor type	Uncooled	
OLED Resolution	800 x 600	
Frame rate	50 Hz	
Video output	Yes (Optional)	
Display	Color OLED matrix, SVGA< 800 x 600	
Polarity	White hot / Black hot / multiple colour model	
Thermal Sensitivity	< 50 mk	
Non-Uniformity Correction	Automatic (Shutter less / Shuttered )	
Spectral Response	8-12µm	
Field of View	6° x 4° minimum	
Eye Relief	52 mm	
Optical Magnification	3x	
E-Zoom	4x	
Diopter Adjustment	-4D to +2D	
Battery type	18650 (2 no's)	
Battery Life	≥ 6 hours	
Standards	MIL STD 810-G / JSS 5855-11-2009 / MIL STD 461-F	
Weight	875 grams	
Detection Recognition (For 75mm lens) Identification	Human:     2000 m,       900 m,     1500 m,       500 m     700m	
DRI Based on NATO Target	<b>Human:</b> 1.8 x 0.5 m <b>Vehicle:</b> 2.3 x 2.3 m	

PS: Customized versions available on request.

Patent No.: 330953-001





High resolution wide area surveillance camera.

The VIRAJ 28 series is a multi-sensor optical platform camera designed specifically for long range surveillance in various settings, such as airports, military bases, coastal defence, and borders.

#### **Features**



vision capability.



It has a day and night The visible camera sensor is equipped with 1/1.8" CMOS with resolution of 1920 x 1080.



The night vision camera is equipped with thermal sensor which is an uncooled Vox sensor with a 640x512 resolution.



rotation of Pan:0 ~ 360° Tilt: ± 45°.

360 The PTZ structure has The sight meets the requirements of MIL-STD JSS-55555.







## VIRAJ28-A

LONG RANGE PTZ CAMERA

MODEL	VIRAJ28-A (DAY AND NIGHT)		
(Day) Detection Recognition Identification	<b>Vehicle:</b> 10 km, 05 km, 03 km	<b>Human:</b> 06 km, 03 km, 01 km	
(Night) Detection Recognition Identification	<b>Vehicle:</b> 08 km, 04 km, 02 km	<b>Human:</b> 05 km, 03 km, 01 km	

identification			
As per NA	ΓΟ Target : <b>Human:</b> 1.8 :	k 0.5 m	<b>Vehicle:</b> 2.3 x 2.3 m
Focal Length	22.5- 105mm		
Thermal Sensor	Uncooled Vox sensor, 640 x 512 resolution		
FOV		Auto focus	
		1/1.8" CMOS	
0.0002lux super high sensitive color to B/W CCD			
Visible camera	2mega	pixels, 1920 X 1080	
sensor	Auto	matic ICR switch	
	H.264	/ MPEG4 / MIPEG	
	32Kbps~	6Mbps~60Hz30 FPs	5
Vicible comes		7 ~ 330mm	
Visible camera lens	Up to 60X zoom, auto focus		
	Auto Focus		
FOV		19.4 x 15.5	
101		4.2 x 3.4	



## RRP S4E

PTZ structure	Dome Shape Structure, Three Window design, anti strong wind
Rotation	Pan: 0~360°, Tilt: +90°~-90° ( Variable )
Speed	<ol> <li>Panspeed: 0.01°~60°/s; Tilt speed: 0.01°~45°/s</li> <li>Acceleration: 80°/s2 Pan; 80°/ s2 Tilt</li> <li>Intelligent sensing shifting function, Supports lens focal length speed adaptive function</li> <li>Variable</li> <li>Direct drive with high torque rare earth permanent magnet synchronous motor, high speed start and stop facility</li> </ol>
PT position	Positioning accuracy: 0.01°- 0.02°, high-frequency fine-tuning pulse precision motor drive, digital angle measurement sensor servo     Positioning time: less than 4s
Track Mode	Supports front-end module automatic tracking     Supports automatic tracking of back-end software
Track Module	1. Video interface: support visible light/ thermal image video switching tracking 2. Video format: composite video, PAL,NTSC 3. Multi-target detection: support multi-target detection 4. Tracking algorithm: Integrate multiple tracking algorithms, which can be switched manually/automatically according to different scenarios, and support recapture and lock when the target is temporarily lost 5. Target size: adaptive gate, the size of the tracking frame changes automatically according to the target size
Protocol	<ol> <li>TCP / IP, HTTP, DHCP, DNS, DDNS, RTP and other network protocols</li> <li>Support ONVIF2.0</li> <li>Pelco-P, Pelco-Dand other industry-standard protocol, baudrate 2400, 4800, 9600, 19200 alternative, proprietary protocols can be customized</li> </ol>
Power supply	AC90V~305V to DC48V turntable rotation power can be controlled in 120W Maximum power consumption 180W
Environmental Indicators	1. Working temperature: -40° C ~ + 60° C 2. Storage temperature: -45° C ~ + 70° C 3. Humidity:<90% 4. Protection: IP67

PS: Customized versions available on request.

Patent No.: 332672-01



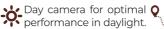


Introducing our cutting-edge Long Range Surveillance Camera, Viraj C-LR, equipped with a cooled sensor, day camera, and optional Laser Range Finder (LRF). Capture detailed imagery even in low-light conditions, with an impressive 20 km range at night. Features include exceptional target clarity, advanced image stabilisation, real-time data transmission, rugged weather-resistant construction, and adaptable LRF integration for precision aiming.

#### **Features**



Cooled sensor technology for enhanced image quality.



Optional Laser Range • Finder (LRF) for accurate distance measurements

Advanced image stabilisation conditions.



Rugged and weather-resistant for clear viewing in various design for reliable outdoor use.



## VIRAJ - C-LR LONG RANGE PTZ CAMERA





### DAY CAMERA

Type 1/2.8" Color CMOS

Number of Pixels 1945 x 1097, Full HD 1080p

Resolution More than 1,000 TVL (Center)

Lens 10-330mm, continuous optical zoom

Optical Zoom X33

#### THERMAL CAMERA

 Type
 InSb FPA

 Resolution
 640 x 512

 Detector Elements Pitch
 15μm

 Lens
 15 - 330mm, F/4.o, Continuous Zoom x 22

 FOV (H)
 WFOV: 35° / NFOV: 1.7° (±10%)

RANGE PERFORMANCE	
Detection (D)	Up to 11.6km (Human Target), 18.1km (NATO Target)
Recognition ®	Up to 3.6km (Human Target), 7.5km (NATO Target)
Identification (I)	Up to 1.7km (Human Target), 4.2km (NATO Target)



PAN -TILT	
Angular Range (Pan)	n x 360°, Continuous Rotation
Angular Range (Tilt)	+90° to -70°
Angular Velocity (Pan)	Up to 30° / Sec
Angular Velocity (Tilt)	Up to 8°/Sec
Positional Accuracy (1 σ)	±0.1°
Repeatability	±0.1°
Reporting Resolution	0.01°
Maximum Payload Weight	20Kg on each side shelf. 10kg on top side shelf.
LRF - Option	
Range	20km
Pulse Repetition	10 pps
TRACKER - Option	
Tracker	Video Tracker
Locking on Target Capability	Yes, Manually by the Operator
General	
Video Output	PAL/NTSC (Thermal camera),HD-SDI (Day camera) or H 264 over IP
Communication	RS-422 or IP
Power	12 / 24 VDC (nominal)
Operating Temperature	-10°C to +50°
Environment Compliance	IP66, designed to meet MIL-STD-461E & MIL-STD-810F



SPECIFICATION			
	Ac Voltage	110V, 60Hz & 220V, 50Hz	
	Rated Power	1000W	
	Peak Power	1200W<30min	
	Surge Power	2400W	
Output	Waveform	Modified sine wave	
	Frequency	60Hz±1%	
	AC Regulation	±10%	
	Standard Receptacles	TYPE-2* 3ea	
	Led Indication	Green LED for power on; Yellow LED for O.T.P.; Red LED for power failure status	



	DC Current	110A	
	No load current draw	0.4A	
	DC Voltage	12V, 24V	
Input	Voltage Range	10 ~ 15VDC, 22 ~ 29VDC	
	Efficiency (Typ.)	82%	
	DC connector	1000mm R type terminal	
	Fuse	30A*5	
	Bat. Low alarm	10±0.5V	
	Bat. Low shutdown	9.5±0.5V	
	Over load	>1200W shut down o/p voltage, re-power to recover	
Protection	Over voltage	29 ~ 31V	
	Over temperature	60±5°/140±9°F	
	Output short	Shut-off	
	Bat. Polarity	By fuse open	
	Working Temp.	0 ~ 30°@ 100% load, 40°@ 70% load	
Eurina and	Working Humidity	20% ~ 90% RH non-condensing	
Environment	Storage Temp., Humidity	-30 ~ +70° / -22 ~ +158 F, 10 ~ 95% RH	
	Temp. Coefficient	±0.05% (0 ~ 50°)	
	Battery Type	Lithium Phosphate	
Battery	Voltage, Capacity	24V, 80AH or can be customized as per the requirement	
and	Protection	Battery BMS, 8S	
Solar panel	Solar Panel	760 Watt	
	Solar Panel Type	Foldable or can be customized as per the requirement	
	Mtbf	98Khrs min. MIL-HDBK-217F (250)	
	Dimension	650 x 500 x 313mm (L*W*H)	
Others	Packing	34 kg ; 1pc (with battery)	
Others	Cooling	>40° (NTC) fan on	
	Applications	Home appliance, Power tools, Office and Portable equipment and Vehicleetc.	

#### **AC Output Receptacles (optional)**

TYPE-1	TYPE-2	TYPE-3	TYPE-4	TYPE-5	TYPE-6
JAPAN	USA	EUROPE	UNIVERSAL	AUSTRALIA	U.K





RA 320 DS-1 IP-Based Camera, merging dynamic day and thermal capabilities in a single unit. Seamlessly transition from high-resolution day visuals to precise thermal imaging, allowing you to monitor your surroundings effectively day and night. With remote access and smart integration, this camera empowers security and surveillance like never before. Whether for industrial monitoring or perimeter security, experience enhanced situational awareness with unparalleled versatility.

#### **Features**

### **ODUAL Imaging Modes:**

Seamlessly switch between day and thermal imaging, providing comprehensive monitoring regardless of lighting conditions.



#### **Remote Accessibility:**

Access live feeds and vectorded footage remotely through IP connectivity, enhancing convenience and real-time monitoring.



#### High-Resolution Day

**Mode:** Capture detailed, color-rich visuals for accurate identification and recognition during daylight hours.



#### Thermal Imaging:

Utilize thermal capabilities for precise heat detection, ideal for security, industrial inspections, and anomaly detection.



#### Smart Integration:

Integrate with existing surveillance systems and software, enabling advanced analytics and automated alerts for enhanced security







### RA320DS DUAL SENSOR IP CAMERA

SPECIFICATIONS		
Thermal camera specifications	160 x 120	
Pixel Pitch (Thermal Sensor)	Vox, 17 µm	
Field of view (Thermal )	40° x 30°	
Lens focal length (Thermal )	18mm	
Wavelength	8-14 µm	
Day Camera Image Sensor	CMOS (2MP) / 1920x1080	
Focal length	9mm	
Field of view	17 x 13°	
Wavelength	400-700 nm	
Working distance	0.5 to 3 m	
Temperature measurement range	20° to 50° C	
Temperature measurement accuracy	+ 0.3°C	
Working temperature	0 to 40°C	
Face Recognition	3mtr	
Frame Rate	2MP@ 30 fps	
Operating temperature	-20° to +40° C	
Face Capacity	30,000	
Humidity	10%-90%	
Dimensions	190x100x75 mm	
Weight	500 gms	
Environmental STD	MIL STD 810 G	





RA 320DS USB-Based Camera, engineered to deliver exceptional performance in both day and night scenarios. This compact powerhouse seamlessly transitions from daylight to low-light conditions, ensuring clear and detailed visuals around the clock. With cutting-edge sensor technology, it captures vivid images and videos, making it an ideal solution for various applications, from video conferencing to nighttime surveillance.

#### **Features**

🙀 Day & Night Performance: 📆 High-Quality Imaging: 🧮 Compact Design: Seamlessly shifts between day and night modes, ensuring clear visuals in

varying lighting conditions.

Employs advanced sensor technology for sharp, vivid images and videos. enhancing overall visual

experience.

Portable and easy to use. making it an ideal solution for various applications like video conferencing and surveillance.

### Plug-and-Play:

Simple USB connectivity for hassle-free setup. compatible with a range of devices and platforms.

**Versatility:** Suited for both personal and professional use, delivering reliable performance across different environments.







SPECIFICATIONS		
Thermal camera specifications	320x240 / 160x120	
Pixel Pitch (Thermal Sensor)	Vox, 17 µm / 12 µm	
Field of view (Thermal )	40 x 30	
Lens focal length (Thermal )	18mm	
Wavelength	8-14 µm	
Day Camera Image Sensor	CMOS (2MP) / 1920x1080	
Focal length	9mm	
Field of view	17 × 13	
Wavelength	400-700 nm	
Working distance	0.5 to 5 m	
Temperature measurement range	20 to 50 C	
Temperature measurement accuracy	+ 0.3 C	
Working temperature	0 to 40 C	
Face Recognition	3mtr	
Frame Rate	2MP@ 30 fps	
Operating temperature	-20° to +40° C	
Face Capacity	30,000	
Humidity	10%-90%	
Dimensions	150x120x90mm	
Weight	500 gms	
Environmental STD	MIL STD 810 G	



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