

lasersan



PRODUCT CATALOG

www.lasersan.tr

About

As Lasersan Advanced Technology Systems Inc., we are an innovative technology company that develops pioneering solutions in the defense industry, aviation and security sectors. Our main fields of activity are electro-optic systems, laser communication systems and radar systems, and we develop high-performance, reliable and advanced technology-based systems by offering end-to-end solutions in these areas.

With our expert engineering staff and strong R&D team, we design high-precision and durable systems suitable for the most challenging operational requirements. We make a difference in our sector by not only adapting to existing technologies, but also working on innovative solutions that will shape the technologies of the future.

As Lasersan, we are moving forward with the goal of becoming a global technology brand. We continue our work not only in the local market but also on a global scale and increase our power with international collaborations. With our investments in technology and innovation, we aim to be a pioneer in our field and offer competitive solutions worldwide.

With our customer-oriented approach, high quality standards and advanced technology solutions, we are taking firm steps towards becoming one of the most reliable companies in the world in the field of defense and security.

Vision

As Lasersan Advanced Technology Systems Inc., our vision is to become a leading technology brand on a global scale by developing innovative solutions in the fields of electro-optic systems, laser communication systems and radar technologies. In the constantly evolving and changing world of technology, we aim to be the most reliable and preferred brand in the defense, aviation and security sectors by making a difference with our advanced engineering and R&D studies.

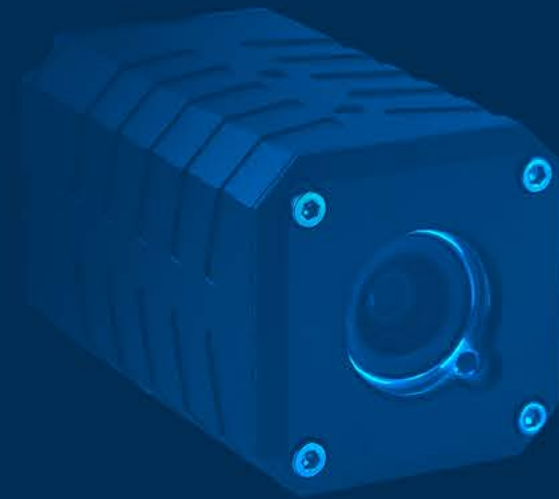
Mission

Our mission is to meet the most challenging operational needs of our customers by developing high-tech, reliable and innovative systems and to increase global competitiveness in the defense industry, aviation and security fields.

In this direction;

- To offer the most advanced solutions in electro-optic systems, laser communication and radar technologies,
- To develop sustainable technologies by focusing on R&D and innovation,
- To produce high-performance and reliable products in accordance with international standards,
- To offer solutions that lead the sector as a strong player in the global market,
- To always keep customer satisfaction and quality at the highest level, are our basic principles.

As Lasersan, we continue to progress with determination to shape the defense and security technologies of the future.



ELECTRO-OPTIC SYSTEMS



ALACA

COLOR DIGITAL NIGHT VISION MONOCULAR



DAYLIGHT USAGE
CAPABILITY



LIFESPAN WITH
THOUSANDS OF HOURS



INTEGRATED USER
INTERFACE



INTERNAL RETICLE
OPTIONS



EDGE-TO-EDGE
SUPER SHARPNESS



HIGH FRAME
RATE



COLOR
IMAGING



LIGHTWEIGHT

lasersan

COLOR NIGHT VISION SYSTEMS

ALACA

COLOR DIGITAL NIGHT VISION MONOCULAR

GENERAL FEATURES

ALACA series is a small size, lightweight and high-resolution helmet and weapon mounted digital color monocular night vision device. Suitable for applications such as individual combat, helmet-assisted night walking, cave operation, night riding, etc. Also, it is suitable for use on rifle as a gun sight thanks to the reticle inside. The monocular design allows users to have a strong overall control ability in the dark and better respond to emergencies. It can be widely used in military observation, border and coastal defence, public security inspection, surveillance, customs, anti-drug, anti-smuggling, navigation, and other dark environments.



TECHNICAL PARAMETERS

Sensor	CMOS	Magnification	1X
Resolution	1920x1080	IR Illumination	1064 nm
Pixel Pitch	10 μ m	Battery	18650, 3.7V@2200mAh
Spectral Range	400-1100 nm	Battery Life	> 5 h
FPS	50 Hz	Startup Time	< 3 sn
Focal Length	23 mm	Weapon Mount	Picatinny Ray MIL-STD-1913
FOV	45.4°x26.3°	Helmet Mount	Support
F#	1.3	Humidity	%95 @40°C
Focus	Manuel	Vibration, Shock	MIL-STD-810
Focus Distance	25 cm ~ ∞	IP Level	IP67
OLED	1920x1080	Dimensions	120 x 90 x 65 mm
Dioptre	-6 - +2	Weight	< 250 g
Eye Relief	25 mm		



TUNAY

DIGITAL NIGHT VISION MONOCULAR



OLED MICRO
DISPLAY



USER-FRIENDLY
INTERFACE



COMPACT AND
LIGHTWEIGHT



SUPERIOR VISIBILITY IN
ADVERSE WEATHER CONDITIONS



ERGONOMIC



HIGH FRAME
RATE



LOW
DELAY



HIGH DYNAMIC
RANGE (HDR)



CAN BE USED
UNDER LIGHT

lasersan

NIGHT VISION SYSTEMS

TUNAY

DIGITAL NIGHT VISION MONOCULAR

GENERAL FEATURES

TUNAY, a digital night vision monocular, adopts 2/3 inch second-generation high-performance sCMOS solid-state image sensor with super sensitivity and high reliability. It's capable of low-latency, high-speed, clear and continuous imaging under starlight conditions. By well-functioning also in strong light environment, it works day and night, and can output low-light images in real time.

TECHNICAL SPECIFICATIONS

DEVICE PARAMETERS

Image sensor dimension	2/3 inch
Spectral response range	400nm ~ 1100nm
Image resolution	800 x 600
Pixel size	10.8μm
Minimum illumination (No light compensation)	0.0001Lx
OLED resolution	800 x 600
Frame rate	60Hz/120Hz (English Menu)

OPTICAL PARAMETERS

Objective lens focal length	12mm
F/#	F1.2
FOV	> 40° x 30°
Exit pupil	8mm
Exit relief	20mm
Magnification	1×
Min. Objective focus	250mm
Diopter	-4D ~ +4D9



THE PARAMETERS OF THE ENTIRE MACHINE

Boot time	< 4s
Battery	163040, CR123A and 18650
Operation time	> 14hours
Size	105 x 57 x 66 (mm) Battery 18650 87 x 57 x 66 (mm) Battery 16340/CR123A
Mechanical interface	J-Arm and L4G24
Extensible electrical interface	9-core aviation socket
Degree of protection	IP67
Weight (Including battery, excluding holder)	< 286g (Magnesium-Aluminum Alloy,Battery 18650) < 250g (Magnesium--Aluminum Alloy,Battery 16340/CR123A)
Environmental adaptability	Operating Temperature: -32°C ~ 55°C Storage Temperature: -40°C ~ 70°C
DRI for Human	633m (Detection) 312m (Recognition) 156m (Identification)
DRI for Vehicle	843m (Detection) 422m (Recognition) 211m (Identification)

AURA

MONOCULAR NIGHT VISION GOGGLE



55 HOURS
BATTERY LIFE



USER-FRIENDLY
INTERFACE



WHITE OR GREEN
TUBE OPTION



SMALL &
ERGONOMIC



HIGH IMAGE
PERFORMANCE

AURA

MONOCULAR NIGHT VISION GOGGLE

GENERAL FEATURES

AURA monocular night vision goggle adopts super second-generation low light tubes. With reliable and superior performance, compact size, and ultra-light weight, it provides high-definition images to effectively improve situational awareness and self-protection capabilities.



OPTICAL SPECIFICATIONS

Magnification	1×
Range of Focus	0.25 m to +∞
Diopter Adjustment	-4~+2
Lens System	F/1.2
FOV	43° ±2%
Eye Relief	25 mm

PERFORMANCE SPECIFICATIONS

Power Supply	AA
Battery Life	55h
IR Illuminator	Yes
Bright Light	Yes
Protection	
Flip-Up On-Of	Yes

OVERALL UNIT INFORMATION

Dimension	96×58×69mm
Weight	255g
IP Rating	IP67
Interface	J-Arm and L4G24

IMAGE INTENSIFIER TUBES

Limiting resolution	64Lp/mm
Signal to noise ratio	22
Phosphor	P43 Green Phosphor / P45 White Phosphor

FOCUS

BINOCULAR NIGHT VISION GOGGLE



20 HOURS
BATTERY LIFE



USER-FRIENDLY
INTERFACE



NIGHT
IMAGING



LIGHTWEIGHT &
ERGONOMIC



EXTRA WIDE EYE
DISTANCE

FOCUS

BINOCULAR NIGHT VISION GOGGLE

GENERAL FEATURES

FOCUS binocular night vision goggle adopts super second-generation low light tubes. With reliable and superior performance, compact size, and ultra-light weight, it provides high-definition images to effectively improve situational awareness and self-protection capabilities.



OPTICAL SPECIFICATIONS

Magnification	1×
Range of Focus	0.25 m to +∞
Diopter Adjustment	-4~+2
Lens System	F/1.2
FOV	43° ±2%
Eye Relief	25 mm

PERFORMANCE SPECIFICATIONS

Power Supply	AA
Battery Life	20h
IR Illuminator	Yes
Bright Light Protection	Yes
Flip-Up On-Of	Yes
Side Flip-Up On-Of	Yes
IPD Adjustment	55-75mm

OVERALL UNIT INFORMATION

Dimension	110×97×90mm
Weight	470g
Environmental Rating	IP67
Interface	L4G24

IMAGE INTENSIFIER TUBES

Limiting resolution	64 Lp/mm
Signal to noise ratio	22
Phosphor	P43 Green Phosphor /P45 White Phosphor



ODAK

FUSION NIGHT VISION BINOCULAR



BINOCULAR 3D
VISION



FAST TARGET
RECOGNITION



MULTI-MODE
FUSION DISPLAY



HIGH USAGE
LIFE



USER-FRIENDLY
INTERFACE



LIGHTWEIGHT &
ERGONOMIC

ODAK

FUSION NIGHT VISION BINOCULAR

GENERAL FEATURES

ODAK harnesses next-generation night vision fusion technology by merging binocular stereoscopic imaging with thermal imaging technology. This integration allows users to swiftly discern targets and identify potential threats. This enhances users' situational awareness and self-defense capabilities during operation.



OPTICAL SPECIFICATIONS

Magnification	1×
Exit Pupil	20mm
Adjustment	-1.5
Lens System	25 F/1.2
FOV	40°
Resolution	640 x 512

OVERALL UNIT INFORMATION

Pixel Pitch	12μm
Frame rate	50Hz
Lens System	F1.1,16mm
FOV	25.8 x 19.1
Resolution	800 x 600 (OLED)
Immersion	IP67

PERFORMANCE SPECIFICATIONS

Operating Temperature Range	-32° ~ +55°
Battery Type	18650x2
Battery Life	8h (fusion)
Dimensions	107x115x85 mm
Weight	575g

GÖKAY

FUSION THERMAL HAND BINOCULARS TARGET LOCATING SYSTEM



GOOD
PORTABILITY



COMPACT AND
LIGHTWEIGHT



FRIENDLY
HUMAN-COMPUTER
INTERACTION



FUSION
TECHNOLOGY



SUPERIOR VIEW IN
ADVERSE WEATHER
CONDITIONS



ERGONOMIC

lasersan

THERMAL-FUSION VISION

GÖKAY

FUSION THERMAL HAND BINOCULARS TARGET LOCATING SYSTEM

GENERAL FEATURES

GÖKAY is a small intelligent observation device that integrates uncooled thermal imager, low-light camera, daylight camera, laser rangefinder and laser pointer. It has a built-in location module, digital magnetic compass and laser rangefinder. Thus, it can find the coordinates of the target precisely. It can be used for day and night observation and target search. It can take pictures and videos for targets. It is convenient and portable to use.



TECHNICAL SPECIFICATIONS

THERMAL

Detector	Uncooled VOX FPA
Resolution	640x512
Wavelength	8-14 μ m
FOV	6,1°x4,8°

LOW-LIGHT CAMERA

Resolution	800x600
Min. Illumination	0.001 lux
FOV	6,8°x5,5°

DAY CAMERA

Resolution	4.6 M Pixel
FOV	4,6°x3,7°

COORDINATE

Mode	GPS, GNSS, Galileo
Azimuth Accuracy	5 m
Elevation Accuracy	10 m

DMC

Yaw	0~360°
Yaw Accuracy	1°
Roll	-90°~+90°
Roll Accuracy	1°
Pitch	-180°~+180°
Pitch Accuracy	1°

GENERAL

Operating Temp	-32°C ~ 55°C
Weight	2,3 kg
Dimensions	198x210x105 mm



KOZGU

HOLOGRAPHIC FUSION THERMAL WEAPON SIGHT



GOOD
PORTABILITY



FRIENDLY
HUMAN-COMPUTER
INTERACTION



SUPERIOR IMAGE IN
ADVERSE WEATHER
CONDITIONS



COMPACT AND
LIGHTWEIGHT



ERGONOMIC

KOZGU

HOLOGRAPHIC FUSION THERMAL WEAPON SIGHT

GENERAL FEATURES

KOZGU is an equipment that combines thermal imaging and red dot technology, mounted on a fusion weapon for operation in all conditions. With the KOZGU, you can maximize your tactical shooting experience. It features a state-of-the-art 12μm, 640x512 resolution sensor with an exceptional NETD of <25mK for superior accuracy. Advanced multi-layer coating technology minimizes scattered light interference, providing excellent images for daytime use.



ADAPTABILITY and ADVANCED

For a more precise surveillance experience during long-distance observation, you can also use the optional 3x magnifier.

VERSARILE DISPLAY MODES SUITABLE FOR EVERY SHOOTING SCENARIO

The KOZGU offers a unique advantage with four distinct image modes designed to meet a wide range of surveillance needs. Whether it's detecting camouflage during the day, navigating through dense smoke, enhancing target visibility in wooded terrain, or operating in complete darkness with thermal vision, the versatile image modes of the KOZGU are tailored to suit your requirements

TECHNICAL PARAMETERS

Detector	640×512/388x284, 12μm, VOX	Color	Black
NETD	≤25 mK	Battery	2×CR123
Lens	f25mm/F1.0	Operating Hours	Thermal mod: >4h Red dot mod: >65h
FOV (Field of View)	17,5°×14°	Weight	>65h650 gr
DRI, Human	D:990m, R:330m, I:165m	Dimensions	175×63×104 mm
Magnification	1X	Operating Temperature	-40°C - +50°C
Eyepiece	34×25 mm	IP Rating	IP67
Eye Relief	90 mm	Material	Aluminum
Display	High Brightness OLED		



AYBARS

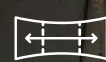
ULTRA LOW LIGHT DRIVING CAMERA



HIGH
PERFORMANCE
IN LOW LIGHT



LATEST
GENERATION
CMOS SENSOR



WIDE
VIEWING
ANGLE



COMPACT AND
POSSIBLE



ERGONOMIC

AYBARS

ULTRA LOW LIGHT DRIVING CAMERA

GENERAL FEATURES

The Ultra Low Light Wide Angle Color Camera represents the latest generation of Ultra Low Light Video Cameras. This camera delivers unprecedented image quality and performance, exceptional light sensitivity, 3D noise reduction, true wide dynamic range and dead pixel correction. The Ultra Low Light Camera offers a significant improvement over its predecessor with extremely low noise levels in the Real Wide Dynamic range.



TECHNICAL PARAMETERS

CAMERA

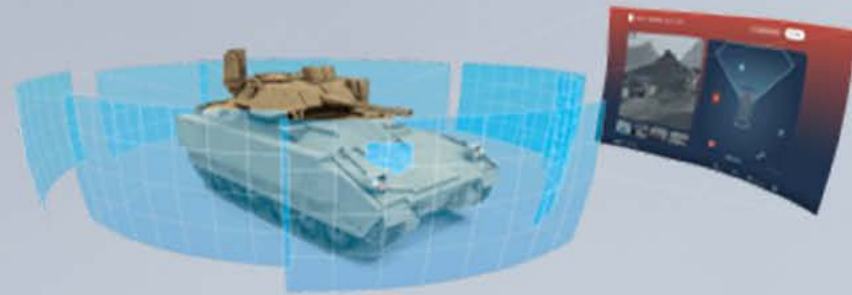
Sensor	CMOS
Type of focus	Fixed
Field of View (FOV)	86°x48°
Resolution	Full HD – 1920x1080
SNR	> 45dB
Min. illum.	Full Color @ 1mlux
Gain	Auto
Frame Rate	25 Hz
AWB	Support
AE	Support
R-WDR	Support
3D-NR	Support

DISPLAY

Type	LCD
Resolution	1920x1200
Size	10.1"
Contrast	900:1 (typ.)
Brightness	400 cd/m2
FOV	80/80/80/80 (typ.)
Rugged Optical Bonding	Support

GENERAL CHARACTERISTICS

Power	18-32 VDC, Typ. 12 VDC@1.5A
Material	Aircraft Aluminum
IP level	IP67
Operating Temp.	-32°C - +55°C
MIL Standards	MIL-STD-810G, MIL-STD-1275E, MIL-STD-461F



ŞAHAN-300

SITUATIONAL AWARENESS CAMERA



NEW GENERATION
UNCOOLED LWIR BAND
THERMAL IMAGER



MULTI-BAND SIMULTANEOUS
SURVEILLANCE WITH FUSION
TECHNOLOGY



REAL-TIME SURVEILLANCE
WITH ZERO DELAY



HIGH QUALITY
DAYTIME CAMERA

ŞAHAN-300

SITUATIONAL AWARENESS CAMERA

GENERAL FEATURES

ŞAHAN-300 Panoramic Driver Vision-enhanced Night Vision Device is equipped with multiple infrared and visible light sensors to provide multi-spectral wide FOV through armour. It can be widely used in such fields as driving assistance, reconnaissance, surveillance, force protection, and urban patrol.



TECHNICAL SPECIFICATIONS

THERMAL CAMERA

Detector	640x512 Uncooled VOx LWIR FPA
Pixel Pitch	12 μ m
NETD	< 40 mK
FOV	130°x38°
MRTD	< 300mK @ 0.38 cyc/mrad

ENVIRONMENTAL

Operating Temp.	-32°C ~ 55°C
Storage Temp.	-40°C ~ 75°C
Humidity	%95 @40°C
Vibration, Shock	MIL-STD-810G
IP level	IP67
Dimensions	230x144x105 mm
Weight	<5 kg

LOW LIGHT TV CAMERA

Detector	CMOS Color Low Light
Resolution	1920x1080
Pixel Pitch	2.9 μ m
Wavelength	400-1100 nm
FOV	130°x40°

ELECTRICAL

Video Out and Communication	Ethernet
Operating Volts	18-32 VDC, 20W
EMI, EMC	MIL-STD-461F, MIL-STD-1275E



AVCI

THERMAL DRIVER SIGHT



REAL TIME HIGH
PERFORMANCE



HIGH
RESOLUTION



HIGH
SENSITIVITY



ADVANCED SIGNAL
TECHNOLOGIES



STRONG ADAPTATION
TO THE ENVIRONMENT



STRONG
PENETRATION

AVCI

THERMAL DRIVER SIGHT

GENERAL FEATURES

AVCI series thermal imagers use IRFPA military-grade uncooled thermal imaging detectors. Vehicle Mounted Thermal Camera Advanced Driver Assistance Systems Vehicle Camera ensures continued driving ability in pitch darkness, heavy smoke, dense fog and other bad weather conditions. It effectively helps drivers avoid unexpected obstacles.



TECHNICAL SPECIFICATIONS

Detector	Uncooled VOx FPA	Data interface	RS422
Resolution	640x512	Operating Temp.	-32°C ~ 55°C
Pixel Pitch	12 μm	Storage Temp.	-40°C ~ 75°C
Spectral Range	8-14 um	Humidity	%95 @40°C
NETD	< 40 mK	Vibration, Shock	MIL-STD-810
FOV	45.8°x37.5°	EMI, EMC	MIL-STD-461
MRTD	< 300mK @ 0.38 cyc/mrad	IP level	IP67
Power Supply	9-36 VDC	Dimensions	80 x 50 x 46 mm
Power Consumption	<6W	Weight	<570 g
Video Out	Analog PAL, Ethernet		

NEBULA

FUSION DRIVER SIGHT



NEW GENERATION
UNCOOLED LWIR BAND
THERMAL IMAGER



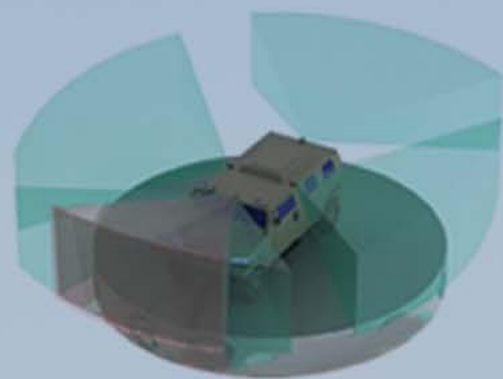
HIGH QUALITY
LOWLIGHT
CAMERA



MULTI-BAND SIMULTANEOUS
SURVEILLANCE WITH FUSION
TECHNOLOGY



REAL-TIME
SURVEILLANCE WITH
ZERO DELAY



NEBULA

FUSION DRIVER SIGHT

GENERAL FEATURES

NEBULA series thermal imagers use IRFPA military-grade uncooled thermal imaging detectors and low-light CMOS sensors. Vehicle Mounted Thermal Camera Advanced Driver Assistance Systems Vehicle Camera provides continuous driving ability in pitch darkness, dense smoke, dense fog and other bad weather conditions. It effectively helps drivers avoid unexpected obstacles. It distinguishes all the details on the road by providing a sense of depth with fusion technology.



TECHNICAL SPECIFICATIONS

THERMAL CAMERA

Detector	640x512 Uncooled VOx LWIR FPA
Pixel Pitch	12 μ m
NETD	< 40 mK
FOV	45°x38°
MRTD	< 300mK @ 0.38 cyc/mrad

ELECTRICAL

Video Out	SDI, Ethernet, PAL Analog
Operating Volts	12-32 VDC, 6W
EMI, EMC	MIL-STD-461F, MIL-STD-1275E

ENVIRONMENTAL

Operating Temp.	-32°C ~ 55°C
Storage Temp.	-40°C ~ 75°C
Humidity	%95 @40°C
Vibration, Shock	MIL-STD-810G
IP level	IP67
Dimensions	80x50x46 mm
Weight	<570 gr

LOW LIGHT TV CAMERA

Detector	CMOS Color Low Light
Resolution	800x600
Min. illum.	0.001 lux
Wavelength	400-1100 nm
FOV	45°x38°



BARBAROS CAMERA



POPULAR ACTION CAMERA

BARBAROS

COLOR DIGITAL NIGHT VISION
MARINE NAVIGATIONAL CAMERA



CAPABLE
<1 mlx moonless starlight sensitivity allows you to see well beyond human eyesight.



AWARE
Wide field of view increases situational awareness to spot unexpected obstacles, debris, markers, vessels, and more.



RUGGED
IP67 rating protects against water, sand, salt, and dust. Dry nitrogen purged to prevent lens fogging. Safely use Admiral in inclement weather conditions.

BARBAROS

COLOR DIGITAL NIGHT VISION MARINE NAVIGATIONAL CAMERA

GENERAL FEATURES

BARBAROS is an ultra-low-light marine navigational camera built around Lasersan’s patented CMOS sensor. It allows mariners of all levels to easily spot obstacles and debris in moonless starlight without white light or expensive thermal cameras – navigating safely, avoiding collisions, and maximizing time on the water. IP67-rated, it’s built to operate in the toughest marine environments.

Barbaros’s flexible mounting and video streaming setups allow both seamless integration with major brand MFDs and the option to view live video on your mobile device – so you can navigate confidently in the dark from any vessel with clear color digital night vision.

TECHNICAL SPECIFICATIONS

Image sensor	1/1.8” progressive scan CMOS
Resolution	2MP
Minimum Illum.	Color: 0.0001Lux
Visible Spectrum	400-1200NM
Focus Range	1m to infinity
Focus Type	Fixed focus, F0.9
FOV	86°x48°
SNR	45dB
Gain Control	Auto/Man
Dynamic Range	76dB
AWB	Support
AE	Support
Real WDR	Support
3D Noise Red.	Support
Power	12 VDC@1.0A
Oper. Temp.	-32°C - +55°C
Waterproof Level	IP67
Housing	Aluminium
Salt Spray Fog Test	ASTM B117



VIDEO AND AUDIO

Network Protocols	IPv4, IPv6, HTTP, HTTPS, TCP, UDP, RTSP, RTCP, RTP, ARP, NTP, FTP, DHCP, PPPoE, DNS, DDNS, UPnP, IGMP, ICMP, SNMP, SMTP, QoS, 802.1x, Bonjour
Video Out	CVBS, ETHERNET
API	ONVIF (Profile S, Profile G, Profile T), HTTP API, SDK
User	Up to 20 users, 2 level: Administrator, User
Security	User authentication (ID and password), IP/MAC address filtering, HTTPS encryption, IEEE 802.1x network access control
Web Browser	IE, EDGE, Firefox, Chrome focus



CAMERA



EYESIGHT

TOYGAR

UAV CAMERA



HIGH
PERFORMANCE
IN LOW LIGHT



LATEST
GENERATION
CMOS SENSOR



WIDE
VIEWING
ANGLE



COMPACT AND
LIGHTWEIGHT



ERGONOMIC

TOYGAR

UAV CAMERA

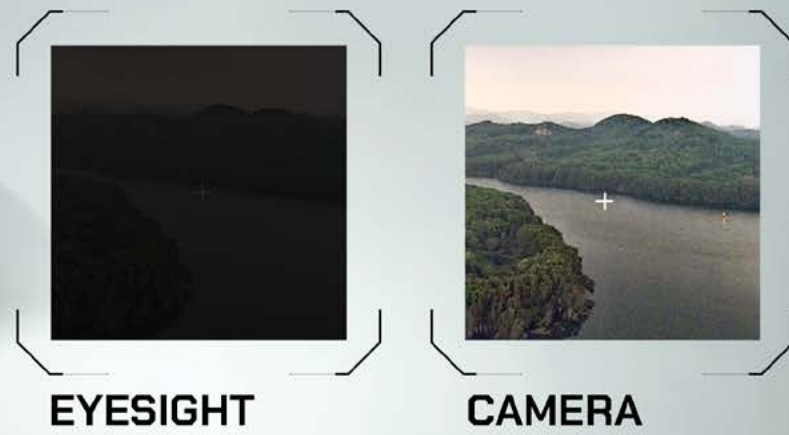
GENERAL FEATURES

The TOYGAR – Ultra Low Light Wide Angle Color Camera represents latest generation of Ultra Low Light Video Cameras. This camera delivers unprecedented image quality and performance, exceptional light sensitivity, 3D Noise Reduction, Real Wide Dynamic Range & Dead Pixel Correction. The Deep Seen – Ultra Low Light Camera offers a significant improvement over its predecessor with extremely low noise levels throughout the Real Wide Dynamic Range.



TECHNICAL SPECIFICATIONS

Sensor	1/2.8" CMOS Image sensor	ONVIF	ONVIF2.4
Focus Type	Fixed focus	Lens	4.2 mm F#1.0
FOV	115°, 145° (Optional)	Network	TCP/IP, HTTP, DHCP, UDP, RTP, RTSP, ARP, DDNS, DNS, HTTPS, P2P
Resolution	2MP	Power	12-32 VDC, Typ. 12 VDC@0.2A
Pixel size	4 µm x 4 µm	Housing	Aircraft Aluminium
SNR	>76dB	Front Glass Heater	Support
Min. Illum.	Full Color @ 1mlux	Anti-Fog	Support
Gain Control	Auto/Man	Waterproof	IP67
FPS	30Hz	Dimensions	80x53x53 mm
AWB	Support	Connector	D38999/23YA35PN, hermetically sealed
AE	Support	Weight	~240g
R-WDR	Support (Detailed Image when flying against the sun)	Operating Temperature	-32°C - +55°C
Video Compression	H265/H264, MJPEG		
Bit Rate	CBR, VBR 32Kbps~10Mbps		



ALAGÖZ

COLOR NIGHT VISION STABILIZED GIMBAL



HIGH WIND
RESISTANCE
DESIGN



COLOR NIGHT
VISION ZOOM
CAMERA



LATEST
GENERATION
THERMAL CAMERA



LASER
DISTANCE
METER



STRONG
COMPATIBILITY WITH
THE ENVIRONMENT



ADVANCED
SIGNAL
TECHNOLOGIES



HIGH
RESOLUTION



HIGH
PRECISION

ALAGÖZ

COLOR NIGHT VISION STABILIZED GIMBAL

GENERAL FEATURES

Producing images based on the AI-powered ISP algorithm, this new technology allows users to see clear, true-color images and take photos/videos in near total darkness (0.0001 lux). Meanwhile, Moth has excellent field of view and ultra-long night vision range. Multi-sensor solution (Night vision zoom camera, laser range finder and thermal imaging camera), integrated design, for all needs of multiple applications in different scenes. A consistent visual experience can also be realized regardless of day and night, rainy and foggy days. In complex lighting scenes such as night and city traffic, imaging is easily affected by light intensity, resulting in loss of imaging details.



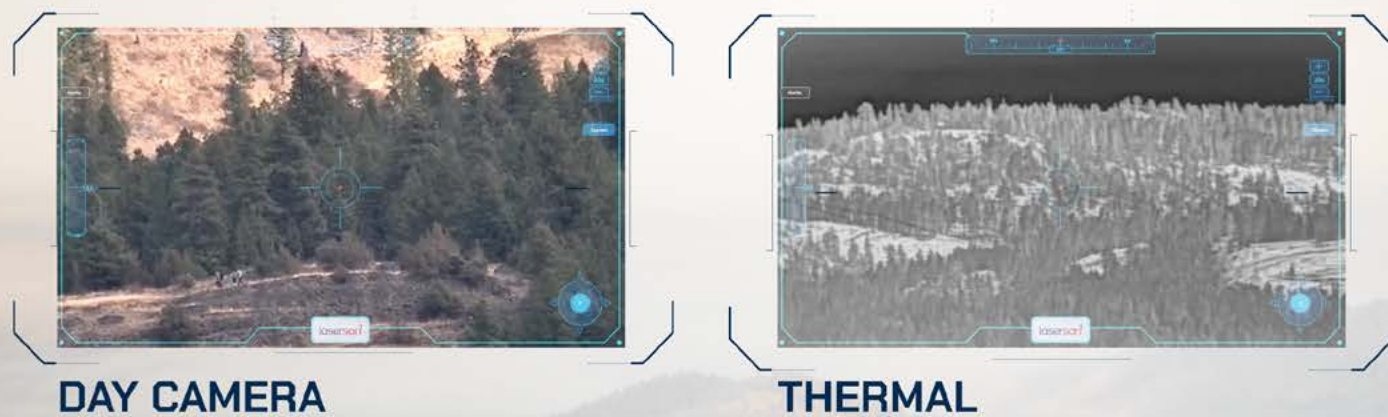
TECHNICAL SPECIFICATIONS

AI CAMERA

Sensor	1/1.8" Starlight CMOS
Min. Lighting	Colored: 0.0001 Lux
Resolution	4MP, 2688*1520P
Frame Rate	5~30 FPS
White Balance, Gain	Auto
Hail Light	Yes
WDR, SNR, DNR, AI HDR, AE	120°
Focal Length	f=7.1~171mm, 30X optic, 160X max zoom
FOV	Y:59.2°x2.5°, D:34.6°x1.4°
Laser Distance Meter	5 - 1500 m

THERMAL CAMERA

Sensor	Uncooled VOx, 640x512
Lens	19 mm
FOV	23°x18°
Digital Zoom	8.0X
Pixel size	12 μm
Temperature Measurement	-20°C~+150°C
PTZ	
Angular Jitter	±0.008°
Rotation Range	P: -120°~+30°, Y: ±320°



YALMAN-150PT

RECONNAISSANCE AND SURVEILLANCE SYSTEM

- NEW GENERATION UNCOOLED LWIR TAPE THERMAL IMAGING DEVICE
- HIGH QUALITY COLOR DAY LOW LIGHT CAMERA
- REAL-TIME SURVEILLANCE WITH ZERO LATENCY
- MULTI-BAND SIMULTANEOUS SURVEILLANCE
- HIGH PRECISION LASER RANGE FINDER
- REPEATABLE HIGH PRECISION PANTILT POSITIONING
- DETERMINING TARGET COORDINATE
- MAP INTEGRATION

YALMAN-150PT

RECONNAISSANCE AND SURVEILLANCE SYSTEM

GENERAL FEATURES

- Supports Optical-Defog, HLC, BLC, WDR, Suitable for a wide range of applications.
- Simultaneous observation.
- Supports 24-hour continuous operation with a motor and drive life of over 1 million cycles.
- Worm gear construction with repeatable positioning accuracy of 0.12° and self-locking in case of power off.
- Supports ONVIF, Compatible with VMS and network devices from leading manufacturers.
- Corrosion resistance rating: ASTM B117 / ISO 9227 (2000 hours) in accordance with classification society standards, IP66, TVS 6000V.



TECHNICAL SPECIFICATIONS

	YALMAN-150PT	YALMAN-180PT	YALMAN-225PT		YALMAN-150PT	YALMAN-180PT	YALMAN-225PT
Sensor	Day: 1/1.8" Sony CMOS Progressive - 4.17 M pixels Thermal: Vox - 640x512 (1280x1024 upscale)			Compression	H.265/H.264/H.264H/MJPEG		
Focal Length	Day: 6~400 mm Thermal: 30~150 mm	Day: 6~400 mm Thermal: 30~180 mm	Day: 6~400 mm Thermal: 25~225 mm	Storage	TF Card		
Zoom	Day: 65X Thermal: 5X	Day: 65X Thermal: 6X	Day: 65X Thermal: 9X	IVS	Motion, Tripwire, Intrusion, Loitering, etc.		
FOV	Day: 66°X40.3°~1.4°X0.8° Thermal: 15°X12°~2.9°X2.3°	Day: 66°X40.3°~1.4°X0.8° Thermal: 15°X12°~2.4°X2.0°	Day: 66°X40.3°~1.4°X0.8° Thermal: 15°X12°~2°X1.6°	Speed	Pan: 0.2°30°/Sec; Tilt: 0.3°13°/Se		
S/N Ratio	≈55dB (AGC Off, Weight ON)			Range	Pan: 360° continuous rotation, Tilt: -45° ~ +45°		
Functions	EIS, WDR, HLC, Defog, Heat Haze Reduction, White Balance, 2D / 3D NR, Flip, Auto focus, Pseudo-Colour, AE, Motion Detection, Tamper Detection, Scene Changing, SD Card, Network, Illegal Access, Proportional Zoom, Power Off Self-Locking, Fan/Heater, Wiper			Accuracy	0.12° (with Encoder)		
Min. Illum.	Colour: 0.001Lux/F1.5			Ethernet	1, RJ45 10 M/100 M Self-adaptive		
Zoom Speed	6.5 Sec (Optics, Wide ~ Tele)			Power	48V DC, Avg: 35W, Max: ≈80W		
Shutter	1/1 ~ 1/30000 Sec			Operating Temp.	-40°C ~ +65°C, ≈95%RH (no condensation)		
Digital Zoom	16X			Dimensions	380*393*575mm (LWH)		
Network Protocols	ONVIF, HTTP, RTSP, RTP, TCP, UDP			Weight	≈32KG		
				DRI Distances 2,3x2,3 NATO Target	Detection: 14.500m Recognition: 4.800m Identification: 2.400m	Detection: 17.500 m Recognition: 6.000 m Identification: 3.000 m	Detection: 21.500 m Recognition: 7.200 m Identification: 3.600 m



DAY CAMERA



THERMAL

YALMAN-660PT

RECONNAISSANCE AND SURVEILLANCE SYSTEM



NEW GENERATION
COOLED MWIR BAND
THERMAL IMAGER



HIGH QUALITY
DAYTIME LOW
LIGHT CAMERA



ACCURATE
TARGET LOCATE
AND TRACK



MULTI-BAND
SIMULTANEOUS
SURVEILLANCE



REAL-TIME
SURVEILLANCE WITH
ZERO DELAY



RECONNAISSANCE AND SURVEILLANCE SYSTEM

YALMAN-660PT

RECONNAISSANCE AND SURVEILLANCE SYSTEM

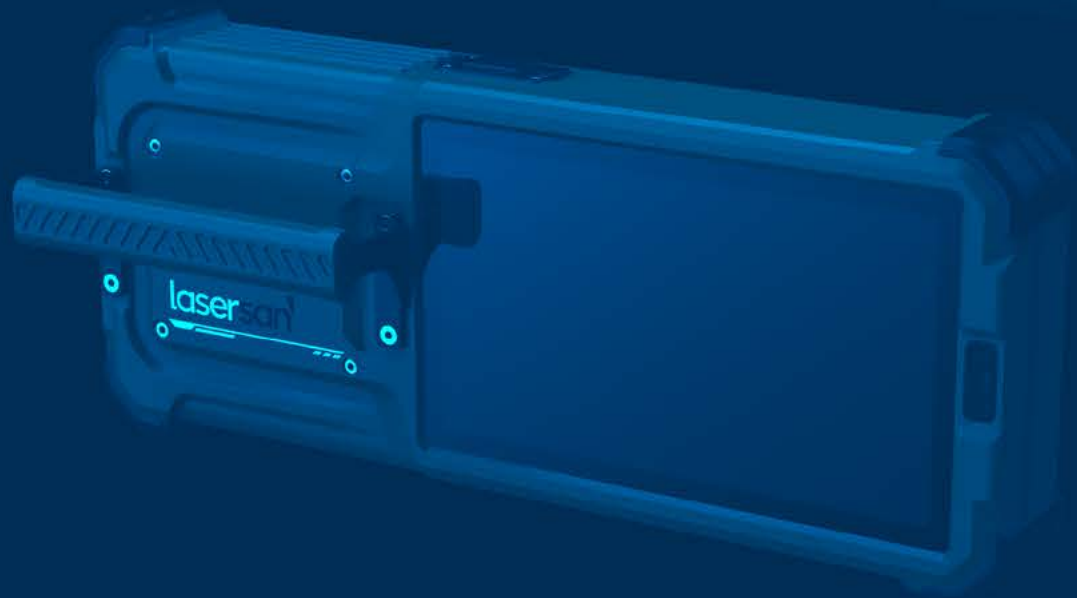
GENERAL FEATURES

- Supports Optical-Defog, HLC, BLC, WDR, Suitable for a wide range of applications.
- Simultaneous observation.
- Supports 24-hour continuous operation with a motor and drive life of over 1 million cycles.
- Repeatable positioning accuracy and self-locking in case of power off.
- Supports ONVIF, Compatible with VMS and network devices from leading manufacturers.
- Corrosion resistance rating: ASTM B117 / ISO 9227 (2000 hours) in accordance with classification society standards



TECHNICAL SPECIFICATIONS

	YALMAN-660PT	YALMAN-1100PT		YALMAN-660PT	YALMAN-1100PT
Sensor	Day: 1/1.8" Sony CMOS Progressive -1920x1080 2 M pixels Thermal: Cooled MCT – 640x512 (1280x1024 upscale)		Compression	H.265 / H.264 / MJPEG	
Focal Length	Day: 15 ~ 1200 mm Thermal: 33 ~ 660 mm	Day: 15 ~ 1200 mm Thermal: 33 ~ 1100 mm	IVS	Smart Record, Motion, Tripwire, Intrusion, Loitering, etc.	
Thermal NETD	≤25mK		Speed	Pan: 0.01°~120°/Sec; Tilt: 0.01°~60°/Sec	
Zoom	Day: 80X Thermal: 20X	Day: 80X Thermal: 33X	Range	Pan: 360° continuous rotation, Tilt: -90° ~ +90°	
FOV	Day: 29.1°×16.6°~ 0.4°×0.2° Thermal: 18.2°×14.6° ~ 0.9°×0.7°	Day: 29.1°×16.6°~ 0.4°×0.2° Thermal: 18.2°×14.6° ~ 0.5°×0.4°	Laser Range Finder	20 km	
Functions	Fire Detection, Zoom Linkage, EIS, WDR, HLC, Defog, Auto Focus, Motion Detection, Object tracking, VMS, SD Card, Power Off Self-Locking, Fan/Heater, Wiper		Ethernet	1, RJ45 10 M/100 M Self-adaptive	
Min. Illum.	Colour: 0.005Lux/F1.5		Power	48V DC, Avg: 100W, Max: ≤200W	
Digital Zoom	16X		Operating Temperature	-32°C ~ +65°C, ≤90%RH (no condensation)	
Network Protocols	ONVIF, HTTP, RTSP, RTP, TCP, UDP		Protection Grade n	Surge and Voltage Transient Protection, IP66, TVS 6000V Lightning Protection	
			Dimensions	525*860*625mm(L*W*H)	
			Weight	≤80KG	
			Ranges	Detection: 50.600 m Recognition: 16.850 m Identification: 8.450 m	Detection: 84.300 m Recognition: 28.150 m Identification: 14.050 m



RADAR SYSTEMS

BARKIN-2D

PORTABLE TWO-DIMENSIONAL BEHIND THE WALL IMAGING RADAR



2D BEHIND-WALL
VIEWING



REAL-TIME HIGH
PERFORMANCE



HIGH
RESOLUTION



ADVANCED SIGNAL
TECHNOLOGIES



STRONG COMPATIBILITY
WITH THE ENVIRONMENT



STRONG
PENETRATION

BARKIN-2D

PORTABLE TWO-DIMENSIONAL BEHIND THE WALL IMAGING RADAR

GENERAL FEATURES

The hand-held 2D Through Wall Radar BARKIN-2D is a vital sign detection device that integrates UWB radar and biomedical engineering technology. This product can penetrate obstacles such as building walls and detect the location and number of human targets behind them in real-time. It features strong penetration capability, a small and portable design, and can be easily controlled with one hand. BARKIN-2D is widely used in through-wall reconnaissance scenarios such as counter-terrorism, hostage rescue, urban street fighting, and border control.



TECHNICAL SPECIFICATIONS

Device Type	Hand-held 2D through wall radar	Detection Range	40m
Penetrable Materials	Bricks, floor slabs, stone slabs, doors and concrete walls, etc., non-metallic, low moisture content objects	FOV	≈120°
Detection Information	Target two-dimensional coordinates, target number, dynamic/static state, one dimensional waveform and interior structure layout	Multi-target Detection	≈3
Display Mode	Supports 1.5D, 2D	Durable Working Time	≈4h (two battery)
		Dimension	≈255mm×105mm×38mm
		Weight	≈0.8kg (including battery)

BARKIN-3D

PORTABLE THREE-DIMENSIONAL BEHIND THE WALL IMAGING RADAR



3D BEHIND-WALL
VIEWING



REAL-TIME HIGH
PERFORMANCE



HIGH
RESOLUTION



ADVANCED SIGNAL
TECHNOLOGIES



STRONG COMPATIBILITY
WITH THE ENVIRONMENT



STRONG
PENETRATION

BARKIN-3D

PORTABLE THREE-DIMENSIONAL BEHIND THE WALL IMAGING RADAR

GENERAL FEATURES

BARKIN-3D behind-the-wall radar is a vital sign detection device based on UWB radar technology and biomedical engineering technology. This product can penetrate obstacles such as building walls, and 3D imaging obtains real-time information such as location, posture and the number of human targets behind the wall. Featured with strong penetration, good portability, high positioning accuracy, long detection distance and intelligent posture recognition, BARKIN-3D is widely used in reconnaissance scenarios such as search-and-rescue, anti-terrorism, hostage rescue, urban street conflict and border control.



TECHNICAL SPECIFICATIONS

Device Type	MIMO architecture 3D imaging via wall radar	Operating Method	Can be carried on the soldier's back or easily hand-held for detection
Penetrable Materials	Concrete, reinforced concrete, cement, plaster, mixed brick, wood, adobe, plaster and other standard building materials	Remote Control via Tablet	Yes
Detection Range	≥50m	Battery Life	≥4h
Viewing Angle	120°	Control Distance with Tablet	≥100m
Detection Mode	Real-time 3D imaging, gesture recognition, positioning, target number display, indoor structure inversion, simultaneous detection of moving and static targets	Charging Method	Type-C
		Radar Dimensions	≤400mm×400mm×45mm

KURSAD-20A

GROUND SURVEILLANCE RADAR

GENERAL FEATURES

KURSAD-20A is a Ku-band pulse Doppler radar specifically designed for ground security surveillance, capable of extensive, persistent, and high-sensity search and monitoring of ground targets, as well as instant multi-target tracking. It can not only monitor and classify ground personnel and vehicles but also effectively warn against low-altitude drone intrusions. It has many advantages, including high detection accuracy, wide coverage, flexible installation, and the ability to operate at all times and in all weather conditions. The system is lightweight, compact, has a simple structure, and can be quickly installed and dismantled.



- **Micro-target Detection:** Phased array rapid scanning, high data refresh rate, minimum detection speed of 0.2m/s, effectively identifying and detecting low, small, and slow targets.
- **Multi-target Handling:** Active phased array system, capable of tracking up to 256 targets (optional processor enhances target tracking capability).
- **High Precision:** Range accuracy of 3 meters, range resolution of 10 meters; angular measurement accuracy of 0.3°, azimuth resolution of 3°.
- **Environmental Adaptability:** Fully sealed design, excellent wind resistance, dustproof, sand proof, waterproof, and humidity-resistant performance, high reliability, maintenance-free.
- **Easy Deployment:** Uses Ethernet communication interface, integrated design for convenient deployment, simple configuration, and easy operation.
- **Integratability:** Can be set up independently or integrated with multiple devices, supports compatibility with various security monitoring platforms and alarm platforms.

TECHNICAL SPECIFICATIONS

Frequency band	Ku Band	Distance Accuracy/Resolution	3m/10m
Operating system	Azimuth Mechanical scanning, Pitch synchronization	Azimuth Resolution	3°
Azimuth Range	± 45°	Data Refrest Rate	> 10Hz
Pitch Range	8°	Dimensions	≤ 575mm × 282mm × 97mm
Detection range	Drone : > 3 km (RCS=0.01m2) Human : > 7 km (RCS=0.5m2) Vehicle : > 15 km (RCS=4m2)	Weight	≤ 18kg
Speed Resolution	0.2m/s ~ 80m/s	Protection Level	IP66
Minimum Range	90 m	Power Supply	AC220V/50Hz, SC24VDC, ≤ 130W
		Operating temperature	-40°C ~ +65°C

KURSAD-20A

GROUND SURVEILLANCE RADAR



AGILE AND PORTABLE



CLUTTER
SUPPRESSION



INTELLIGENT
PERCEPTION



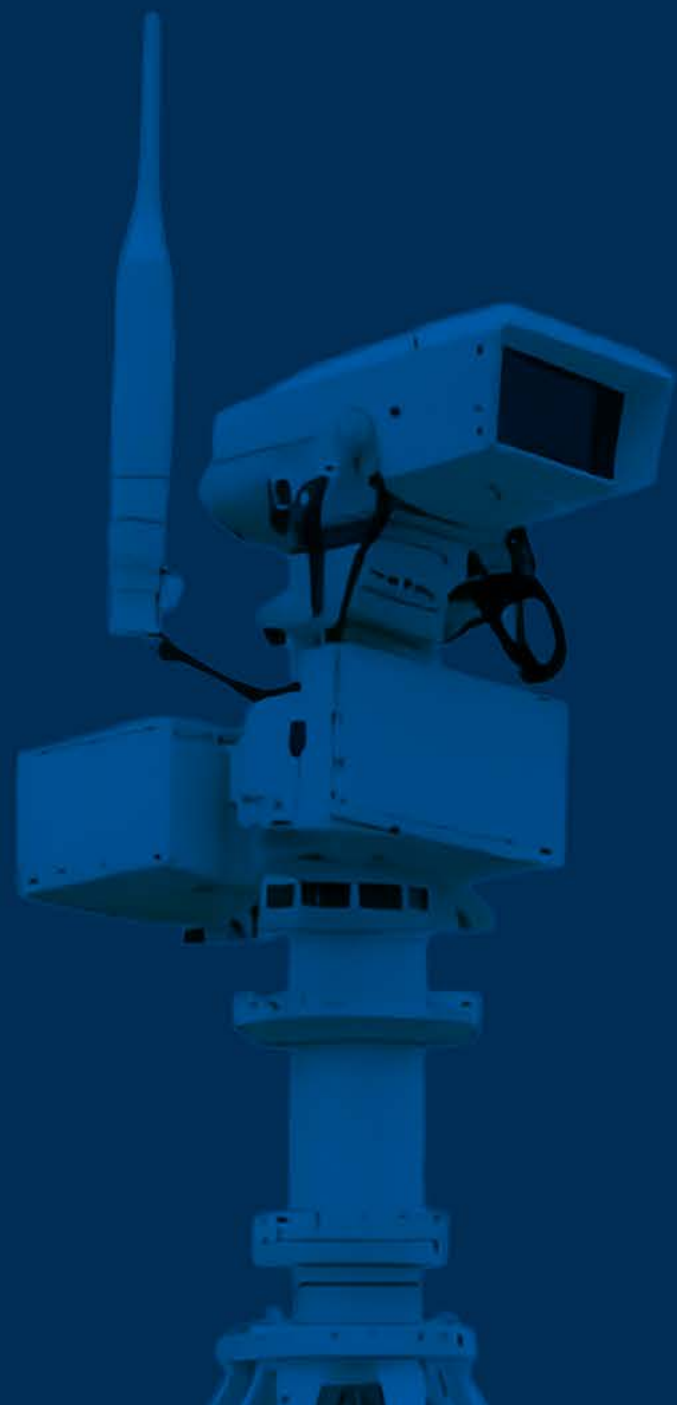
TARGET
RECOGNITION



ACCURATE TARGET
LOCATE AND TRACK



REAL-TIME
SURVEILLANCE WITH
ZERO DELAY



LASER BASED COMMUNICATION SYSTEM

RAYPATH

LASER BASED HYBRID COMMUNICATION SYSTEM WITH RF BACKUP LINK



LARGE BANDWIDTH (REAL TIME, 512 FULL HD VIDEO, VOICE, DATA, ALL INFORMATION)



SECURE COMMUNICATION DATA, VIDEO, VOICE ETC.



HIGH SPEED (1GBPS)



CAN NOT BE JAMMED



CAN NOT BE DETECTED



NO LICENCE FROM SPECTRUM AUTHORITY



LOW POWER CONSUMPTION



EASILY DEPLOYABLE



NO INTERFERENCE



PORTABLE

RAYPATH

LASER BASED HYBRID COMMUNICATION SYSTEM WITH RF BACKUP LINK

GENERAL FEATURES

FSO/Laser Communication System (LCS) consists of wireless laser communication systems that provide point-to-point high-speed, broadband connectivity, are immune to jammers, electronic warfare and eavesdropping, require no licensing, and can be easily deployed(portable). It is also known in the literature as Free Space Optic (FSO) Communication. In a hybrid-operating laser communication system, when a physical obstacle obstructs the laser, it automatically switches to an RF communication system. This ensures that your connection is never lost, providing a reliable communication system. Thus, you have a perfect link in all weather conditions.



TECHNICAL PARAMETERS

LASER GENERAL FEATURES

Throughput	1 Gbps
Distance	11.000 meter
Delay	250us
User Interface	RJ 45 & SFP
Standard	IEEE 802.3
Weight	<10 kg
Power	<56 W

BACKUP CHANNEL

Backup Channel	RF
RF Speed	350 Mbps
Frequency	5-6 GHz
RF Power	16 W
Monitoring	IP-Firmware
Configuration	SNMP

APPLICATION AREAS

- Military Communication and Information Systems
- At Satellite System Installation Centres,
- Between the Security Base Area and Division/Brigade/ Battalion,
- In areas requiring RF silence,
- In base areas where anti-drone systems are deployed,
- During military exercises,
- In RF-dense and polluted operational zones,
- In communication areas requiring extra security
- Outdoor wireless access
- Storage Area Networks
- Last-mile access
- Enterprise connectivity
- Fiber backup
- Metro-network extensions
- Service accelerations
- Point-to-point links
- WAN access bridging
- Between Military Bases,
- Within the Integrated communication infrastructure
- Between Communication Electronics Information Systems
- Combat Electronic Information Systems

lasersan¹



ADVANCED TECHNOLOGY SYSTEMS

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