

Laser Weapon

ABOUT US

EGI OPTIK INDONESIA

EGI OPTIK INDONESIA is a leading provider of advanced laser technology, electro-optical systems, and precision defense solutions. We deliver cutting-edge capabilities to military, government, industrial, and research institutions across the region.

VISION

To become Southeast Asia's most trusted partner in precision laser and electro-optical defense technology.

MISSION

Delivering world-class laser systems with uncompromising quality, local expertise, and end-to-end technical support for mission-critical applications.

CORE COMPETENCIES

Innovation

Pioneering laser solutions for emerging defense challenges

Engineering

Precision-engineered systems built to exacting standards

Reliability

Battle-proven technology for mission-critical operations

Precision

Sub-milliradian accuracy across all product lines

Local Support

In-country technical teams for rapid deployment

Professional Team

Certified engineers with international training

WHY CHOOSE EGI

Proven Expertise

Decades of combined experience in laser technology and defense systems engineering.

End-to-End Solutions

From consultation and design through deployment, training, and ongoing maintenance.

Strategic Partnership

We invest in long-term relationships, providing dedicated support and continuous innovation.

Our Devices

Three advanced systems engineered for precision, reliability, and mission success.



01

Anti-Drone Defense

Laser Weapon System

Non-kinetic counter-drone defense with precision targeting up to 2 kW continuous wave laser power.

[Learn More →](#)



02

Anti-Drone Operations

Counter-UAV Laser Complex

A mobile counter-UAV laser complex delivering 10 kW of directed energy for autonomous drone elimination.

[Learn More →](#)



03

Long-Range Surveillance

Remote Control Unit

1000m remote control surveillance with ultra-low-light imaging and 30x optical zoom.

[Learn More →](#)

Laser Weapon System

A revolutionary non-kinetic defense platform engineered to neutralize hostile FPV drones with surgical precision. The system delivers continuous-wave laser energy at up to 2 kW, disabling drone optical sensors without collateral damage.

KEY BENEFITS

- Non-kinetic engagement — zero explosive risk
- Precision targeting up to 500 meters
- Dual-mode: handheld & tripod-mounted
- Air-cooled for continuous field operation
- Integrated multi-layer safety system
- Instant response against FPV threats



APPLICATIONS

- Counter-UAS / Anti-Drone Operations
- Critical Infrastructure Protection
- Military Forward Operating Bases

Technical Highlights & Safety

TECHNICAL HIGHLIGHTS

Wavelength	1080 nm infrared
Output Power	0.75 - 2.0 kW continuous wave
Effective Range	30 - 500 meters
Engagement Time	Up to 15 seconds per burst
Optical Sight	1× - 4× magnification
Cooling	Air-cooled, no external chiller
Power Supply	Backpack-mounted, 7.5 kW

INTEGRATED SAFETY SYSTEM

- Emission lock key — prevents unauthorized activation
- Double-click trigger — eliminates accidental discharge
- Emergency stop button — instant system shutdown
- Startup delay — ensures operator readiness
- Class IV laser compliance — meets international standards

COMPETITIVE ADVANTAGES

- Zero Collateral Damage**
Non-kinetic engagement eliminates explosive risk to surrounding personnel and infrastructure.
- Rapid Deployment**
Lightweight, man-portable system operational within seconds of power-on.
- Low Operating Cost**
No ammunition required — unlimited engagements per power cycle.
- Silent Operation**
No acoustic signature, maintaining tactical advantage.
- Scalable Power**
Adjustable output from 750W to 2kW based on threat level.

Fenix Mobile Counter-UAV Laser Complex

A mobile counter-UAV laser complex delivering 10 kW of directed energy for autonomous drone elimination. Featuring long-range surveillance, automatic tracking, and high-power laser engagement — all integrated on a single mobile platform for rapid battlefield deployment.

KEY FEATURES

- 10 kW high-power laser — effective drone elimination
- Long-range day & night surveillance system
- Automatic scanning & image stabilization
- Auto tracking system — lock and engage targets
- Integrated radar detection system
- Mobile platform — rapid deployment capability

APPLICATIONS

- Counter-UAV / anti-drone operations
- Critical infrastructure protection
- Military base & perimeter defense

POWER. PRECISION. PROTECTION.

10 kW

Laser Output Power



1500 m

Strike Range

Auto

Tracking

360°

Coverage

5000 m

Detection

<10 s

Time Strike

Day/Night

Operation

System Composition & Technical Parameters

SYSTEM COMPOSITION

High-Power Laser	10 kW directed energy source
Surveillance System	Long-range electro-optical day/night
Radar System	Integrated detection & tracking

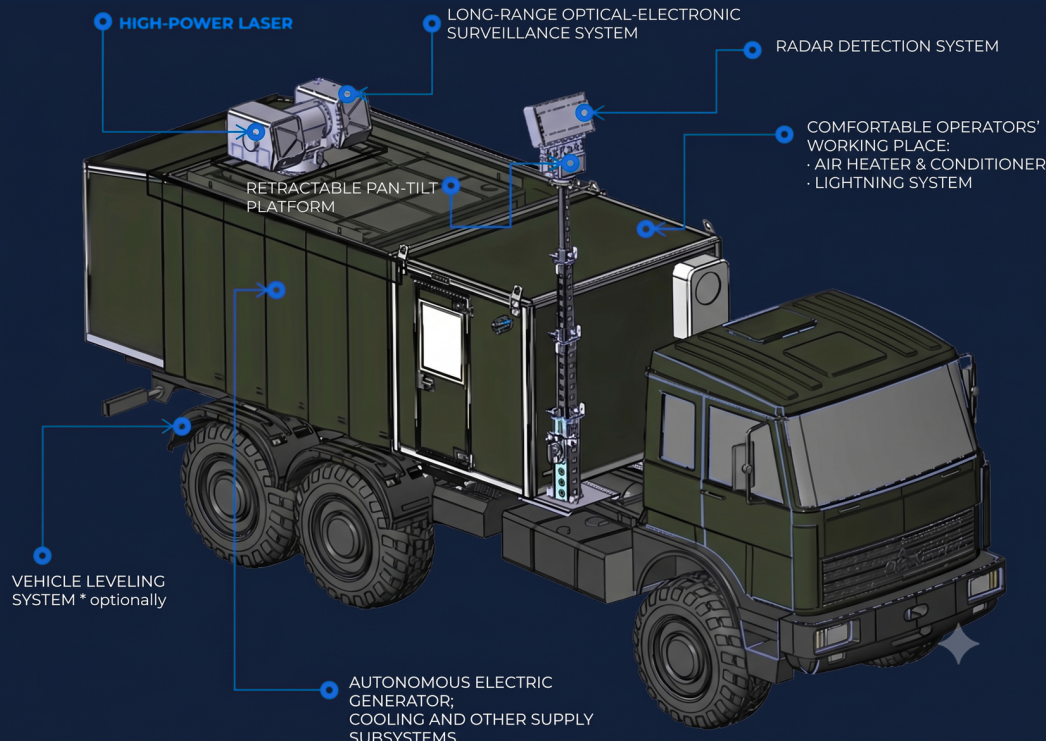
TECHNICAL PARAMETERS

Laser output: 10 kW continuous wave

Effective strike range: up to 1500 m

Detection range: up to 5000 m (radar)

Deployment time: 30 minutes



LASER WEAPONS	
Wavelength	1.06 ... 1.08 μm
Maximum output power:	10 kW
Power consumption:	35 kW single phase
Laser spot size at range	500 m – 30 mm, 1000 m – 60 mm
Small-sized UAV damage range: (minimum, maximum):	500 m ... 1500 m
Time range for hitting a UAV type target:	less than 10 sec
Operating temperature range:	-20°C...+50°C
Continuous operation time of the laser complex	120 sec (4 cycles of 30 seconds with 10 second breaks)
Battery charging time	40 min
LASER WEAPON OPTICS BLOCK	
TV camera	Resolution 1920x1280
Thermal imaging camera	Cooled sensor, 612x512
IR Illuminator	+
Laser rangefinder	+
Pan-Tilt Platform	Azimuth rotation angles: Nx360° Tilt angles: -10°/+80°
Detection range of small UAVs (DJI Mavic)	4500 m
Maximum angular velocity of tracking moving targets	2.5° / sec
Surveillance system operating range	0,5 m ... 1500 m
RADAR	
Frequency range	X-band
Maximum scanning range	5000 m
Small Target Detection Range (DJI Mavic)	4500 m
Number of targets scanned simultaneously	50
Radar turntable scanning/rotation speed	1 rotation in 2 sec
Maximum mast extension height	no more than 3 m
Control and data transfer interface	Ethernet
CHASSIS PARAMETERS, GENERAL PARAMETERS	
Maximum travel speed in transport position	as part of the MAZ chassis: on public roads 80 km/h, on dirt and country roads – 30 km/h, off-road 5 km/h* (depending on the chassis, parameters may vary)
Power reserve	in MAZ – 300 km* (parameters may vary depending on the chassis)
Overall dimensions in transport position	as part of the MAZ chassis: 9330 mm x 2744 mm x 3860 mm * (parameters may vary depending on the chassis)
Overall dimensions in working position	as part of the MAZ chassis: 9330 mm x 2744 mm x 5212 mm * (parameters may vary depending on the chassis)
Mass of the complex	as part of a MAZ chassis: no more than 25,000 kg * (parameters may vary depending on the chassis)
COMPLEX CREW	3 people: driver, 2 operators
SYSTEM DEPLOYMENT TIME (INTO COMBAT POSITION)	30 min

Remote Control Observation Unit

An advanced electro-optical surveillance platform capable of detecting and identifying aerial threats at distances exceeding 8,000 meters. Featuring Full HD imaging with ultra-low-light capability, this system delivers 24/7 situational awareness in the most demanding operational environments.

KEY CAPABILITIES

- Full HD 1920x1080 real-time imaging
- 30x optical zoom + 12x digital zoom
- Ultra-low-light channel for night operations
- Drone detection up to 8,000 meters
- Integrated laser rangefinder

APPLICATIONS

- Border & Perimeter Surveillance
- Counter-UAS Early Warning
- Critical Infrastructure Monitoring
- Military Intelligence Gathering
- Maritime Domain Awareness

IMAGING PERFORMANCE

1080p

Full HD Resolution

30×

Optical Zoom

12×

Digital Zoom

58.1°

Wide FOV

25 fps

Frame rate

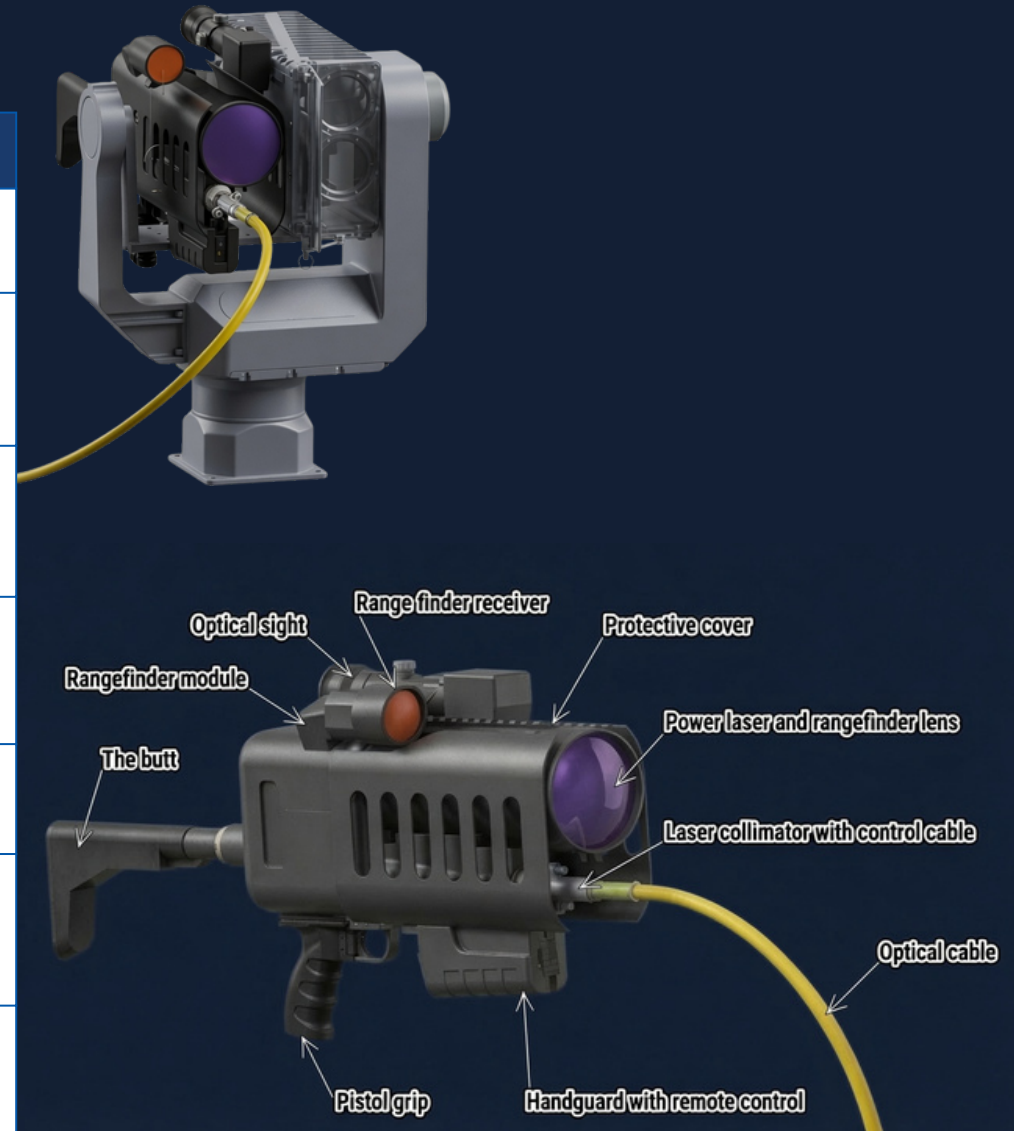
6,5 - 162,5 mm

Focal length



Detection & Night Vision

Parameter	Specification
Narrow horizontal FOV (TV channel)	2,3° ± 10 %
Visual detection range on maximum focal length ¹ (TV channel)	DJI Mavic Pro: < 3000 m DJI Phantom 3/4: < 5000 m DJI Matrice 600: < 8000 m
Visual recognition range on maximum focal length ¹ (TV channel)	DJI Mavic Pro: < 1000 m / < 1000 m; DJI Phantom 3/4: < 2000 m / < 1600 m; DJI Matrice 600: < 3100 m / < 2500 m
Lens (Ultra-Low light channel) / Picture mode (Ultra-Low light channel)	Ultra-low light fixed focal length lens B&W
Horizontal FOV (Ultra-Low light channel)	Less than 14 deg
Visual detection range ² (Ultra-Low light channel)	DJI Mavic Pro < 600 m DJI Phantom 3/4 < 1100 m DJI Matrice 600 < 1800 m
Visual recognition range ² (Ultra-Low light channel)	DJI Mavic Pro < 200 m DJI Phantom 3/4 < 400 m DJI Matrice 600 < 700 m



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Precision Technology for a Smarter Future

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