



# HIGH ENERGY LASER WEAPON

## Directed Energy system for decisive action against UAS threats

EOS' Directed Energy (DE) system uses a powerful laser as the directed energy source. The laser power available ranges from 36–100 kW, depending on the application.

The DE system has been developed as an element of the EOS Titanis UAS defence system, and specifically to disable UAS in Groups 1, 2 and 3 and to neutralise sensors on UAS at long range.

The system is supplied with radar and infrared threat detection, fast-cuing algorithms, target acquisition and beam locking, and safety systems.

The system can be supplied with 100–500 stowed engagements or operated continuously from external electrical power.

The DE effector complements kinetic effectors, such as guns and cannon, to overcome certain potential disadvantages of counter-UAS applications, including collateral damage caused by rounds flying beyond the target or engaging targets directly overhead.

The DE effector overcomes these limitations and, operating alongside kinetic effectors, provides a complete defence system against UAS from Groups 1–3.

The system can be made operational rapidly after transport, with on-site setup times of around three hours for experienced crews.

### KEY FEATURES

Laser ranges up to 36–100kW

FOV (visible) scalable from 1.2° up to 33°

FOV (IR) scalable from 1.4° up to 27°

0.8 second (60°) slew to cue

0.7 second target lock

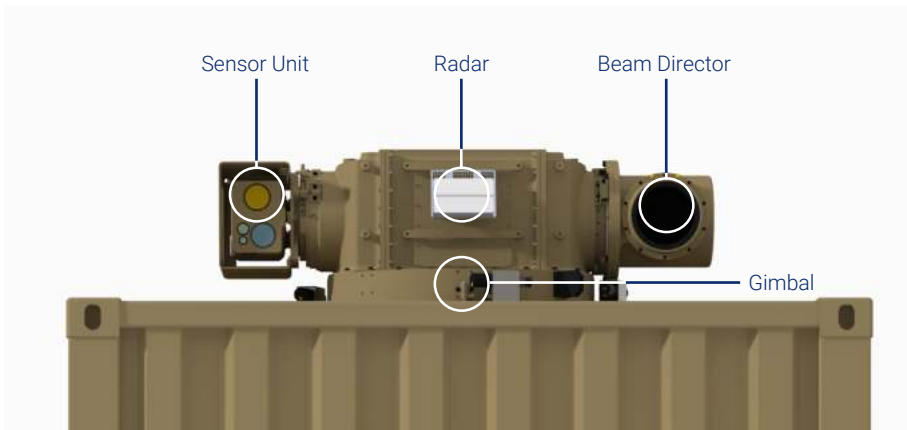
Radar and IR threat detection included, or third party via standard interface

100% duty cycle subject to electrical power

Unlimited stored engagements with external electrical power

200 m to 3 km engagement range

## SCALABLE HEL DEFENCE



LASER	CONFIGURATION
Power	36 - 100 kW
Duty cycle	100% subject to electrical power
Weight above the roof line	210 kg
Number of stored engagements	100-500
Number of engagements with continuous power	Unlimited
Beam elevation	+90° to -10°
Beam direction	n x 360°
Beam stability	0.1 mrad

TARGET ACQUISITION SYSTEM	CONFIGURATION
FOV (visible)	Scalable from <1.2° to >33°
FOV (IR)	Scalable from <1.4° to >27°
Radar threat detection	Included, or third-party via standard interface
IR passive threat detection	Included, or third-party via standard interface

ENGAGEMENT	CONFIGURATION
Slew to cue	400 msec (60°)
Target lock	500 msec
Target neutralisation (Group 1)	1.3 sec (35 kW)
Target neutralisation (Group 2)	4.4 sec (35 kW)
Engagement range	200 m to 3 km (typical)

DEPLOYMENT
20' transportable shipping container
8 x 8 custom installation

SENSOR UNIT	DAY CAMERA	THERMAL IMAGER
Detection range	> 12,000 m	> 13,700 m
Recognition range	> 5600 m	> 5100 m
Identification range	> 4700 m	> 4000 m



**WATCH VIDEO**

HEL-05/2024



Phone  
+61 2 6222 7900

Email  
enquiry@eos-us.com

Web  
eos-us.com

