

TOPLIGHT NG+

High-End Multi-Mission Payload System



The TL NG+ is a multi sensor, dual LRU powerhouse engineered for wide area persistent surveillance (WAPS) combined with high resolution surveillance and investigation channels. The WAPS allows continuous, real time situational control for high-tempo missions. With its advanced suite of MWIR, SWIR, VIS, and wide FOV channels, paired with a high performance scanning mechanism, WAPS enables operators to detect, classify, and track multiple threats across vast regions with exceptional speed and precision.

What sets WAPS apart is its revolutionary fusion of wide area scanning with full investigation grade sensing in a single integrated system. This groundbreaking concept merges broad coverage detection with high resolution investigation channels, empowering operators to instantly transition from regional awareness to fine detail target analysis without changing payloads, modes, or platforms. It is a true force multiplier - dramatically reducing sensor to decision time and giving commanders unprecedented ISR dominance.

Optimized for counter UAS, border surveillance, maritime security, force protection, and strategic ISR, the WAPS configuration delivers a new level of persistent awareness. Backed by smart onboard processing, advanced scanning modes, and seamless data flow, the system transforms complex environments into actionable intelligence at mission speed.

TOPLIGHT NG+

WAPS Configuration

Electro-Mechanical

Type:	4 Gimbal Gyro-stabilized System
Field of Regard:	Azimuth: 360° x N (continuous) Elevation: +70° to -110°
Angular Velocity:	Azimuth / Elevation: 120° / Sec (max)

Wide-Area Persistent Surveillance (WAPS)

Detector:	MWIR 2560x2048 ; VIS 2448x2048
E. Zoom:	X 12
WAPS coverage:	Configurable - 80°, Aerial - MAX 40x40, AD- 0°-25°, Nx360°
Observation FOVs:	40° to 11°, 5.5°

Spotter Channel

TI Camera:	3.6 - 4.2 μ m
Spectral Range:	FPA 2560 x 2048 XBN
Detector:	2.2°, E. zoom x3
Field of View:	InGaAs 1280 x 1024 pixels, see spot capability
SWIR Camera:	0.9 - 1.7 μ m
Spectral Range:	0.8° , 0.4°
Field of View:	
Daylight Camera:	4K CMOS color camera
Field of View:	1.25°

Laser Options

Designator:	1.064 nm, up to 22 PPS, STANAG-3733, Class 4
Range Finder:	1.54 nm, up to 20km Class 1
	Or
Spot detection:	1.064 nm, up to 30km Class 4
	4Q detector
	Or
High power LRF:	1.54 nm, up to 40 km
	Up to 20PPS, Class 1M
LRF:	1.54 nm, up to 20km, 1-5 PPS, Class 1

Laser Pointer

Type:	830 nm, 180mW, CW / Pulsed
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Physical Characteristics

Weight (Turret):	50 kg (110lb)
Dimensions (Turret):	(Ø) 419mm (16.5") x (H) 500mm (19.7")
EPU (ext. unit):	10kg

Electrical Interface

General:	MIL-STD-704F, MIL-STD-1275F
Power Consumption:	MAX 400W, Nominal 300W
Video Outputs:	HD-SDI (1080p), H.264/5 ,optical

Environmental Conditions

Temperature:	-32°C to +50°C
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Features

- Superior Gyro-stabilized Image
- Multi-Spectral Imaging
- Advanced Image Processing
- Airborne Qualified
- Integrated with Aircraft's Systems
- Integrated with Naval systems
- Integrated with Land and AD Systems

Optional

Image Processing

- Local and Global AGC
- Advanced Video Enhancement
- ATR- Auto Target Recognition (optional AI capabilities)
- VMD- Video Motion Detection
- Advanced ground, maritime & aerial target tracker
- ATIR- Anti Turbulence Image Recognition
- Pseudo Color Ti



50kg



Radar



INS



Control Unit



Command & Control Systems