LUMIRA V2

DUAL SENSOR GIMBAL PAYLOAD

🧠 AI CAPABILITIES

- ✓ **Multi-Class Detection:** Simultaneous ID of object types.
- ✓ **AI Detection & Tracking:** Auto acquisition & persistent tracking.
- ✓ **Single Click:** User-friendly target selection.

CONNECTIVITY

Compression: H.265 High-Efficiency
Streaming: Low-latency RTSP via Ethernet
Control: Full API for Camera & Gimbal
Peripheral: USB Joystick Support
OS: Linux & Windows Compatible
Recording: Local on GCS

OPTICAL SPECIFICATIONS (EO)

Sensor	1/2.8" Sony CMOS
Resolution	1920×1080 (Full HD)
Optical Zoom	40x
Digital Zoom	12x
Focal Length	4.25 mm - 170 mm
Aperture	F1.6 - F4.95
FOV (Horiz)	66° (Wide) to 1.9° (Tele)
Stabilization	Digital Image Stabilization
Focus	Auto, Manual (15 ranges)

IR CAMERA SPECIFICATIONS

Sensor Type	VOx Microbolometer
Focal Length	65 mm / 55 mm
FOV (Horiz)	12°
Pixel Pitch	17 μm / 12 μm
Spectral Band	LWIR (8-14 μm)
Digital Zoom	4x
Palettes	6 Modes (WhiteHot, etc)
Enhancement	Default **CLAHE** (Contrast Limited Adaptive Histogram Equalization) & **DDE** (Digital Detail Enhancement) for superior start clarity.
Image Controls	Brightness, Contrast

WEIGHT	**2.2 kgs***
DIMENSIONS	L:260mm W:256.5mm H:337.5mm
BUILT FOR	MIL-STD-810H
INGRESS PROTECTION	IP-5x*

GIMBAL PERFORMANCE

Pan (Yaw)	±345° (180°/s)
Tilt (Pitch)	±120° (180°/s)
Roll	±45°
Stabilization	3-Axis with Roll damping
Modes	Lock Mode, Roll Mode

ELECTRICAL & INTERFACES

Input (Gimbal)	15V-52V DC
Input (Mods)	12V Internal
Power	**22W (avg)**, Max 3.5A@14.5V
Compute	EON Edge Onboard

ON-SCREEN DISPLAY (OSD)

Date/Time • EO/IR Zoom • Palette ID • Gimbal PTR Angles • Lock Status • System IP

DRI RANGES (KM)

PERFORMANCE DATA

Vehicle (EO) — 8.0km Max
ID:1.0 | Rec:2.0 | Det:8.0

Vehicle (IR) — 4.0km Max
ID:0.65 | Rec:1.1 | Det:4.0

Human (EO) — 2.0km Max
ID:0.4 | Rec:1.0 | Det:2.0

Human (IR) — 1.0km Max
ID:0.15 | Rec:0.3 | Det:1.0

STANDARD NATO CRITERIA:
- **Det** (Detection) — Something is there
- **Rec** (Recognition) — Classify type (Tank vs Car)
- **ID** (Identification) — Specific model (T-72)