

LMY-Eagle-TC1 Drone Sensors Specifications

LMY-Eagle-TC1-LIVOX

GPS/IMU	Vector-Nav Vn-200
Flight Computer	
Software	Livox API/ LMY-Harmony
Weight / Size	2 kg / 20x20x25 cm
Outputs	Geo-referenced imagery / Point Clouds / Mesh
Operational temperature	-20 to +50°C
Accuracy with GPS – Rel / Absolute	0.5 pixel / 2-5 m (No Post Processing / Single Freq. Post Processing)
Accuracy w/o GPS – Rel / Absolute	0.5 pixel / 1-2 m (Depending on Ortho Absolute Accuracy)

Camera **ADTI - Oblique Mapping Camera Surveyor 5S**

Sensor	APS-C CMOS
Pixels / Total Pixels	24 MP (6000x400) / 5x24 MP -120 MP
Lenses Vertical / Oblique (45 deg)	25 / 35 mm
Resolution @100 m	1.5 cm

LIDAR

LIVOX AVIA

LIVOX HORIZON

Sensor	250 m @ 20% reflectivity / 2 cm	250 m @ 20% reflectivity / 2 cm
Points per second	Upto 720,000 (triple return)	Upto 720,000 (triple return)
FOV (deg) / Resolution (deg)	R - 70.4° (Horizontal) × 77.2° (Vertical) 70.4° (Horizontal) × 4.5° (Vertical) 1.5 cm	R - 70.4° (Horizontal) × 77.2° (Vertical) 70.4° (Horizontal) × 4.5° (Vertical) 1.5 cm
Wavelength (nm) – 1 Class Eye Safe	903	903
Beam divergence	Vertical – 0.28° / Horizontal - 0.03°	Vertical – 0.28° / Horizontal - 0.03°

LMY-Eagle-TC1-VeloXX

GPS/IMU	Vector-Nav Vn-200
Flight Computer	
Software	LMY-Harmony
Weight / Size	3 kg / 20x20x40 cm
Outputs	Geo-referenced imagery / Point Clouds / Mesh
Accuracy with GPS – Rel / Absolute	0.5 pixel / 2-5 m (No Post Processing / Single Freq. Post Processing)
Accuracy w/o GPS – Rel / Absolute	0.5 pixel / 1-2 (Depending on Ortho Absolute Accuracy)

Camera

ADTI - Oblique Mapping Camera Surveyor 5S

Sensor	APS-C CMOS
Pixels / Total Pixels	24 MP (6000x4000) / 5x24 MP -120 MP
Lenses Vertical / Oblique (45 deg)	25 / 35 mm
Resolution @100 m	1.5 cm

LIDAR

Velodyne VLP16 Puck (lite)

Velodyne VLP32 Ultra Puck-32

Max. Range / Range Accuracy	100 m / \pm 3 cm	200 m / \pm 3 cm
Wavelength (nm) – 1 Class	903 nm	903 nm
Points per second per returns/ Returns	300,000 / 2	600,000 / 2
FOV / Resolution	Vertical: 30°/2° Horizontal: 360° / 0.1-0.4	Vertical: 40°/1.25° Horizontal: 360° / 0.1°-0.4°
Beam divergence	3 mrad	3 mrad

