

# LMY-360Rover-TC1 Mobile Mapper Specifications

## LMY-360Rover-TC1-LIVOX

GPS/IMU	Vector-Nav Vn-200
Processor (On Board)	
Software Recording / Processing	Lady-Bud SDK/ LMY-Harmony
Outputs	Geo-Referenced imagery, Point Clouds, Mesh
Accuracy with GPS – Rel / Absolute	0.5 pixel / 2 m SEP90 (Single Freq. Post Processing)
Accuracy w/o GPS – Rel / Absolute	0.5 pixel / 0.1 - 0.5 m SEP90 (Depending on 3D Reference Accuracy)

### Camera

### FLIR / Lady-Bug 5

Sensor	Sony IMX264
Pixels / Total Pixels	5 MP (2048 × 2464) / 6 x 5MP -30 MP
Frame Rate	6 images/sec
Resolution @10 m	1 cm

### LIDAR

### LIVOX AVIA

### LIVOX HORIZON

Max. Range / Range Accuracy	250 m @ 20% reflectivity / 2 cm	130 m @ 20% reflectivity / 2 cm
Points per second	Upto 720,000 (triple return)	Upto 480,000 points/s (dual return)
FOV (deg) / Resolution (deg)	NR - 70.4° (Horizontal) × 77.2° (Vertical) 70.4° (Horizontal) × 4.5° (Vertical)	81.7° (Horizontal) × 25.1° (Vertical)
Wavelength (nm) – 1 Class Eye Safe	903	903
Beam divergence	Vertical – 0.28° / Horizontal - 0.03°	Vertical – 0.28° / Horizontal - 0.03°

# LMY-360Rover-TC1-VELOxx

GPS/IMU	Vector-Nav Vn-200
Processor (On Board)	
Software Recording / Processing	Lady-Bug SDK/ LMY-Harmony/LMY Trajectory Viewer
Outputs	Geo-Referenced imagery, Point Clouds, Mesh
Accuracy with GPS – Rel / Absolute	0.5 pixel / 2 m SEP90 (Single Freq. Post Processing)
Accuracy w/o GPS – Rel / Absolute	0.5 pixel / 0.1 - 0.5 m SEP90 (Depending on 3D Reference Accuracy)

## Camera

### FLIR/Lady-Bug 5

Sensor	Sony IMX264
Pixels / Total Pixels	5 MP (2048 × 2464) / 6 x 5MP -30 MP
Frame Rate	6 frames/sec (Full Resolution)
Resolution @10 m	1 cm

## LIDAR

### Velodyne VLP16 Puck (lite)

### Velodyne VLP32 Ultra Puck-32

Max. Range / Range Accuracy	100 m / ± 3 cm	200 m / ± 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

