

## KEY FEATURES

Integrated, turnkey system

- LIDAR sensor
- Medium format digital frame camera
- Flight management system
- Data storage system

Flexible usage enables increased asset utilization

Configuration options for LIDAR and metric camera

**WIDE-ANGLE FULL WAVEFORM DIGITIZATION LIDAR COMBINED WITH A CALIBRATED DIGITAL CAMERA PROVIDES COST EFFECTIVE AND HIGH ACCURACY DATA COLLECTION.**

### Advanced Technology

The Trimble® Harrier Corridor Mapping System sets a new standard for digital image acquisition and LIDAR scanning. When your customer asks for the real details, you need the Trimble Harrier.

The combination of the wide-angle full waveform digitization LIDAR and the medium format digital frame camera, makes extracting the most comprehensive vertical information from the acquired echo signals possible.

The Trimble Harrier integrated digital camera has been designed to generate geometrically and radiometrically consistent high-quality color and CIR digital imagery.

The camera also may be operated stand-alone for medium altitude aerial imagery projects for mapping or photogrammetric applications, thus expanding your opportunities.

### Expand Your Business

Designed for both airplane and helicopter operation, the Trimble Harrier is ideal for corridor mapping, area mapping, and remote sensing. Expand your opportunities with monitoring of power transmission and distribution, pipelines, and other infrastructure.

### Data Production Solution

Combined with either Trimble's INPHO or TopPIT software you have a complete end-to-end data collection and processing solution that allows you to:

- Capture georeferenced data
- Extract features and attributes
- Analyze conditions and change
- Manage assets and operations
- Put geospatial data to work in any enterprise

### Customer Benefits

- Compact complete integrated system
- Flexible usage
- Integrated workflow for LIDAR data and image data processing



# Trimble Harrier Corridor Mapping System

## SYSTEM COMPRISED OF:

- Integrated Control Unit
- Flight Management System
- Georeferencing system
- LIDAR sensor
- Trimble Aerial Camera (dual camera optional)
- Data storage system

## SPECIFICATIONS

### LIDAR Sensor Specifications

LIDAR sensor	LMS-Q560
Beam deflection	rotating polygon
Field of view	45 degrees – 60 degrees (maximum)
Measurement rate	120,000 Hz (45 deg.), 160,000 Hz (60 deg.)
Operating altitude	30 m – 1200 m
Beam divergence	< 0.5 mrad
Range capture	full waveform digitization
Intensity capture	16.67 dynamic range
Scan frequency	10 Hz – 160 Hz
Eye safety class	Class 1
Swath width	83% of operational altitude (45 degrees)
Range resolution	.2 cm
Vertical accuracy	< 0.15 m (absolute)
Horizontal accuracy	< 0.25 m (absolute)
Scan pattern	parallel lines
Temperature	0 to +40 °C (operation) -10 to +50 °C (storage)
Humidity	0% – 90% non-condensing
Weight	.32 kg (+10 kg camera)
Dimensions sensor head <sup>1</sup>	64 × 30 × 48 cm

### AVAILABLE OPTIONS

- Medium format digital frame camera
- Flight management system
- Portable data storage system
- Data processing center
- Ground power supply unit

### Digital Camera Specifications (Optional)

Model	Trimble Aerial Camera, or Trimble Applanix DSS <sup>2</sup>
Operating altitude	0 – 6000 m
Field of view	45 degrees (60 optional)
Array size	22 or 39 megapixel
Channels	three (RGB or CIR)
Maximum exposure rate	down to 2.5 seconds
Image pixel size	down to 3 cm
Image scales	1:250 – 1:10,000
Calibration	geometrical and radiometrical

### Computer Rack Specifications

Data logging time	> 8 h
Power	28 V DC, 20 A max.
Temperature	0 to +40 °C (operation) -10 to +50 °C (storage)
Humidity	0% – 90% non-condensing
Positioning system	Trimble Applanix POS/AV <sup>3</sup>
Weight	42 kg
Dimensions computer rack <sup>1</sup>	54 × 50 × 44 cm

<sup>1</sup> Vibration isolated case mounts directly on the aircraft floor.

<sup>2</sup> See Trimble Applanix datasheet.

<sup>3</sup> POS AV IMUs of differing accuracy and export restrictions available.

Specifications subject to change without notice. Errors and omissions excepted.

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