

HARRIER 24

Medium-Format Imaging System And Wide Angle LIDAR Scanner



Enhance your business opportunities: Medium-format digital imaging system combined with a wide angle Laser scanner.

System Description

Enhance your business opportunities, add LIDAR to your business.

The HARRIER 24 is the ready to use low cost LIDAR system that allows you to easily and successfully add LIDAR scanning to your existing business.

But you can get more: the HARRIER 24 is also the digital imaging answer for aerial survey and remote sensing.

Due to the integrated wide angle Laser scanner, the HARRIER 24 allows you also to expand your business just by switching on the Laser.

HARRIER 24 integrates a stable medium-format digital frame camera and the Laser scanner Riegl LMS-Q240, which is a very cost effective and well proven airborne Laser scanner.

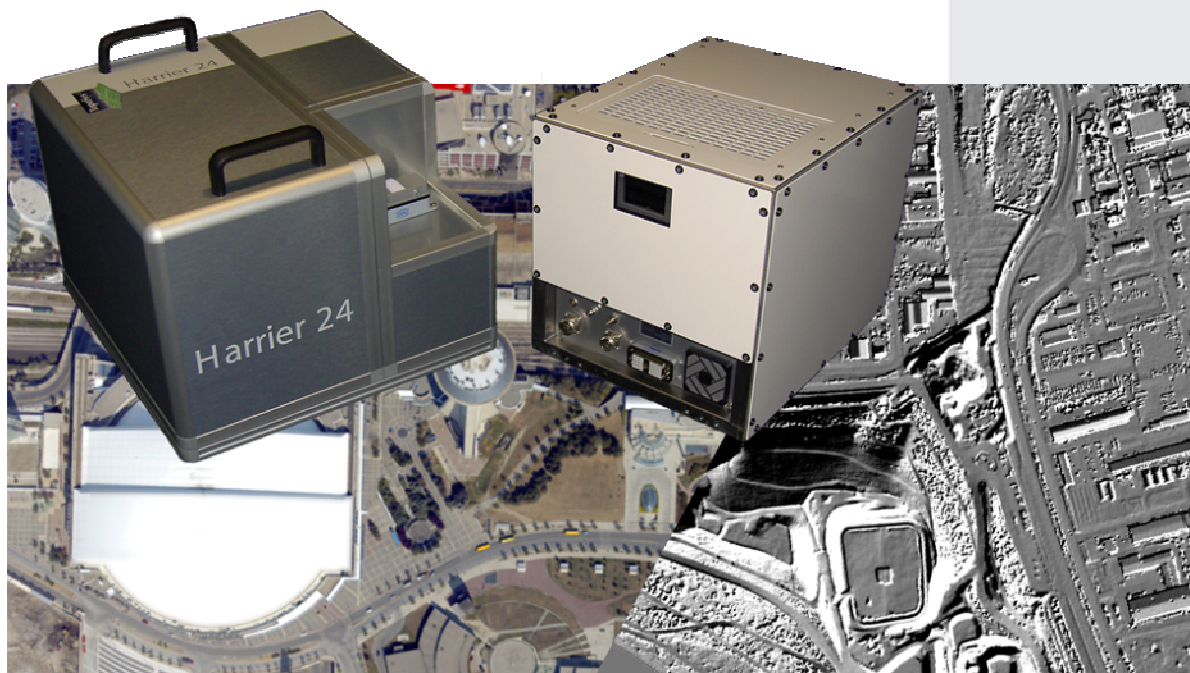
Data processing is workflow oriented, optimized and fully integrated for both, images and elevation data.

Key Performances

- Integrated medium-format digital frame camera
- Image resolution up to 3 cm
- Up to 10 kHz effective distance measurement rate
- 60 degrees field of view (80 degrees as option)
- Maximum altitude of 6,000 m for images
- Rigid LIDAR integration
- Cost effective solution

Customer Benefits

- Low cost LIDAR and imaging system
- Complete aerial image solution
- Competitive advantage
- Flexible usage
- Integrated data flow and work flow of LIDAR and image data processing



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Specifications Sensor Head

Laser scanner:	Riegl LMS-Q240i
Beam deflection:	Fixed, polygon
Field of view:	60 degrees fixed 80 degrees (option)
Measurement rate:	10,000 Hz
Operating altitude:	30 m – 650 m
Beam divergence:	2.7 mrad
Range capture:	First or last or alt.
Scan frequency:	6 Hz - 80 Hz
Eye save:	Class 3R
Swath width:	115 % of op. alt. (60 degrees)
Range resolution:	0.020 m
Vertical accuracy:	< 0.15 m (absolute)
Horizontal accuracy:	< 0.25 m (absolute)
Spot distribution:	Saw tooth
Temperature:	-0 - +40 deg. (op.) -10 - +50 deg. (stor.)
Humidity:	0 % – 90 % Non-condensing
Weight:	30 kg
Dimensions sensor:	50 x 48 x 35 cm
Vibration isolated case mounts directly on the floor	
Available options:	Enhanced field of view of 80 degrees Integrated medium-format digital frame camera Integrated flight management system

Specifications Digital Camera (Option)

Model:	Applanix DSS or Rollei AIC
Operating altitude:	0 – 6,000 m
Field of view:	60 degrees
Array size:	22M / 39M
Channels:	Three (RGB or IGB)

Max. exp. rate.:	2.5 sec.
Image pixel size:	Down to 0.03 m
Images scales:	1:250 to 1:10,000
Position accuracy:	Down to 0.03 m
Exposure control:	manual, prio. apert., prio. shutter
Light metering:	Center weighted av.
Shutter :	1:125–1:4,000 (DSS) 1:125–1:1,000 (Rollei)
Calibration:	Geometry and Radiometry

Specifications Computer Rack

Log time:	> 8 h
Power:	28 V DC, 15 A max.
Temperature:	-0 - +40 deg. (op.) -10 - +50 deg. (stor.)
Humidity:	0 % – 90 % Non condensing
Positioning system:	Applanix POS/AV 410
Weight:	45 kg
Dimensions computer:	40 x 40 x 45 cm
Vibration isolated case mounts directly on the floor	

Operations And Applications

Low-resolution area mapping, stereo corridor mapping, aerial survey and remote sensing
All kind of high resolution ortho images, rapid response, pipeline monitoring, power line mapping, corridors, ice and snow monitoring, glacier monitoring.
Helicopter operation

Data Processing

TopPIT software package for pre and post processing of LIDAR and true ortho images
Harmonized data flow and work flow for LIDAR and image data