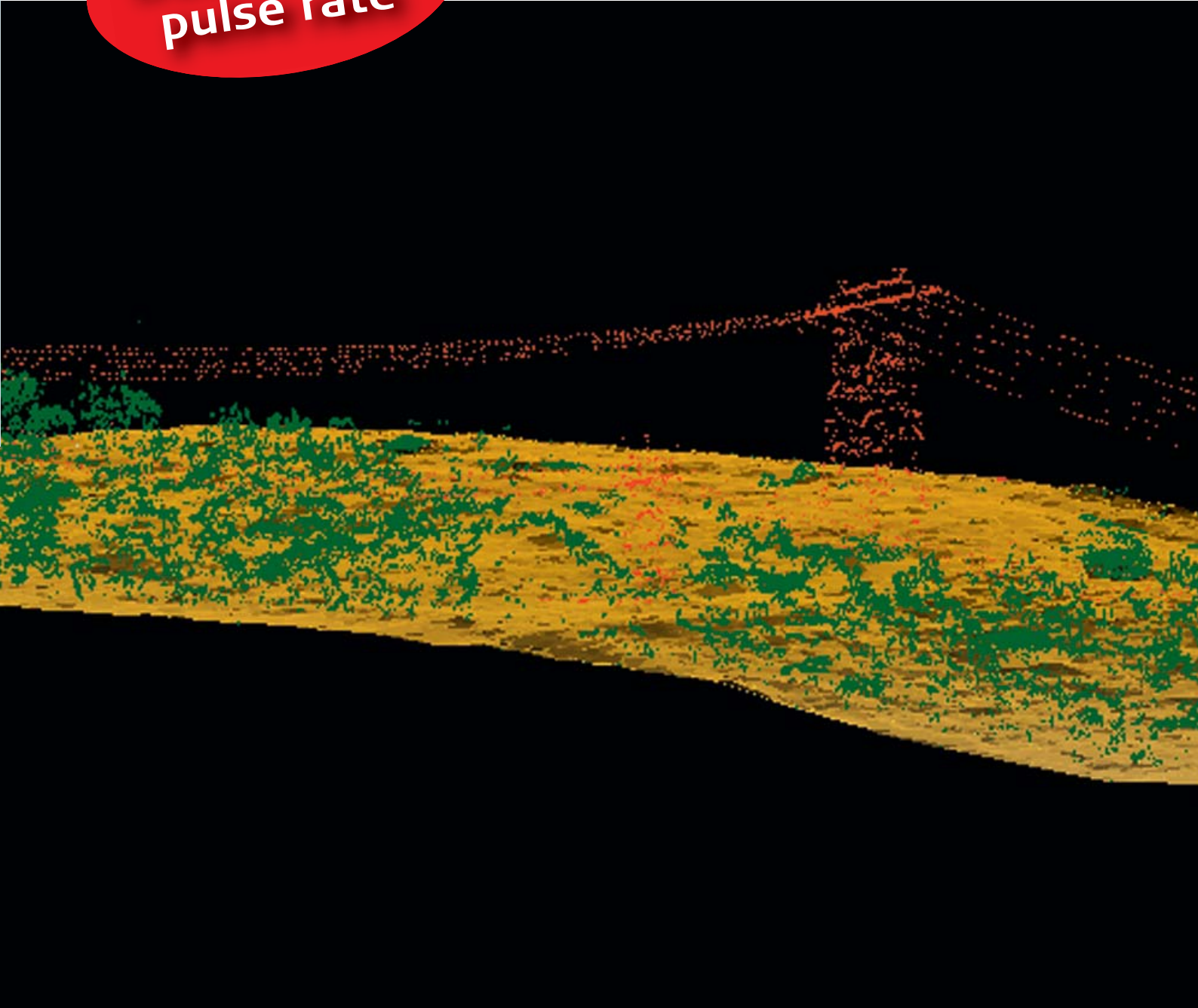


Leica ALS Corridor Mapper  
**Affordable ALS performance  
for corridor mapping LIDAR  
applications**

**true 200 kHz  
pulse rate**



- when it has to be **right**

**Leica**  
Geosystems

# Leica ALS Corridor Mapper

## Airborne Laser Scanner

Technical heritage from industry-leading Leica ALS-series instruments ensures high accuracy



Low-profile scanner accommodates pod mounting



Airborne-qualified display with real-time coverage verification



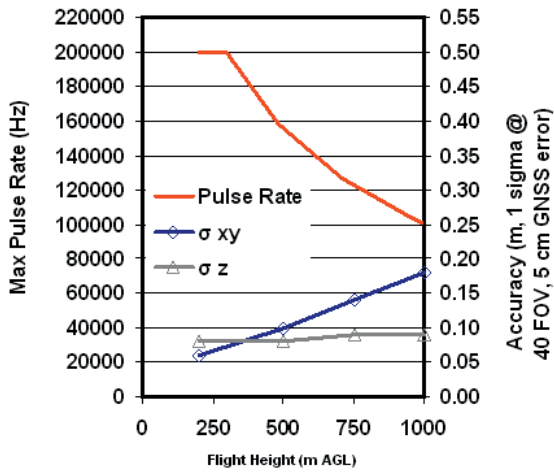
Compact, rugged electronics

The latest Leica LIDAR system, the ALS Corridor Mapper is targeted to both lower-altitude and corridor mapping markets. This new airborne LIDAR system offers high point density and high accuracy, independent of pulse rate... from a helicopter-compatible 200 m AGL all the way to a robust 1000 m AGL ceiling, all without sacrificing detection of small or low-reflectivity features. The variable field of view allows maximum flexibility in obtaining terrain details, whether out in the open or over urban canyons. And flexible auxiliary sensor ports allow seamless connection to imaging sensors. The ALS Corridor Mapper provides a cost-effective solution, offering the high accuracy that users expect for both large-scale and corridor mapping.

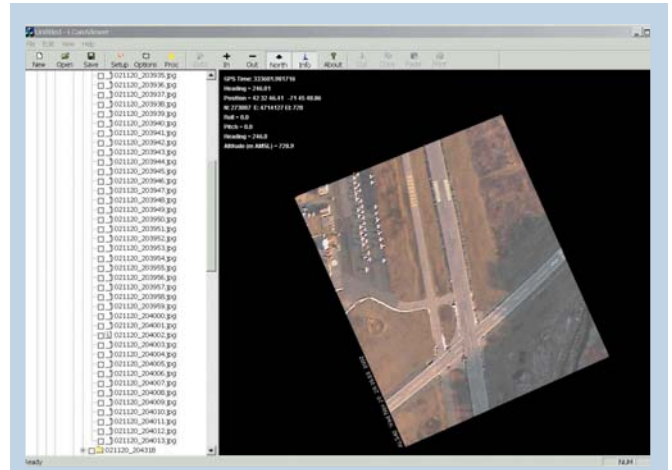
**Affordable Leica ALS performance for corridor mapping LIDAR applications.**

### Performance Specifications

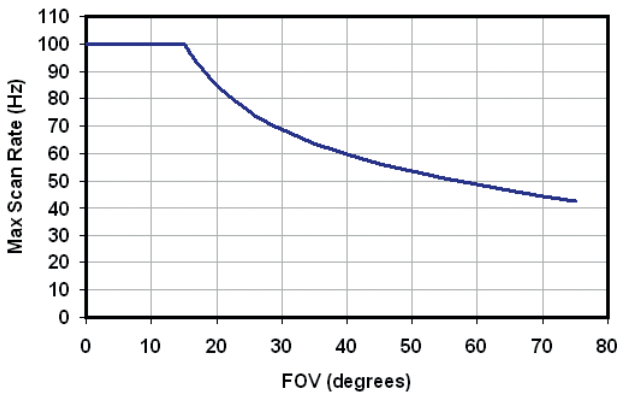
- **Operating Altitude** 200 m – 1000 m AGL
- **Accuracy** (see graph at right, example for 40-degree FOV, including 5 cm GNSS error)
- **Number of Returns** 4 (first, second, third, last)
- **Number of Intensities** 3 (first, second, third)
- **Intensity Digitization** 8 bit intensity + 8-bit AGC level + continuously variable laser output
- **Maximum FOV** 75 degrees full angle
- **Roll Stabilization** automatic adaptive, range = 75 minus current FOV
- **Laser Divergence** 0.22 mr @ 1/e<sup>2</sup> (~0.15 mr @1/e)
- **Recording Media** 500 GB removable HDD (~18 hours at maximum pulse rate)
- **Flight Management** via Leica FCMS flight management software



■ Maximum Pulse Rate 200 kHz



■ **Digital Camera** 1280 x 1024 camera displays real-time imagery on GUI, while recording individual frames with embedded navigation data; simple post-flight display with any .jpg viewer, plus easy lookup and oriented display (with annotation) using included Leica LCam Viewer software



■ Maximum Scan Rate 100 Hz

### Leica ALS Corridor Mapper

#### Physical Specifications (unmounted)

##### Size, Weight

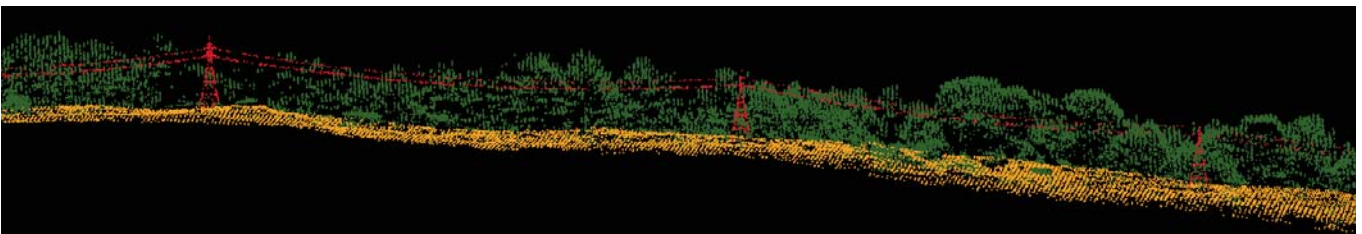
Scanner	37 W x 68 L x 27 H cm, 43 kg
Control Electronics	45 W x 47 D x 36 H (8U) cm, 45 kg

Power Consumption 910 W @ 22.0 - 30.3 VDC

##### Extended Operating Temperature

Scanner	0 °C - 40 °C cabin-side temperature
Control Electronics	0 °C - 40 °C

Section view from cover image data set



Whether you want to capture airborne data of an agricultural area or of a city, record the challenges in a disaster area or the expanse of a high tension line, you need reliable measurements and solutions for your entire workflow to build image-based maps. Leica Geosystems' broad array of airborne sensors and integrated software solutions capture data efficiently, reference imagery accurately, measure easily, analyze and present spatial information in 3D.

Those who use Leica Geosystems products every day trust them for their precision, their seamless integration and their superior customer support. When data really counts, Leica Geosystems delivers geospatial imaging solutions with precision, integration and service.

**When it has to be right.**

Illustrations, descriptions and technical specifications are not binding and may change.  
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**Total Quality Management – our commitment to total customer satisfaction.**

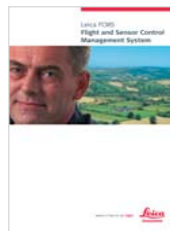
Ask your local Leica Geosystems dealer for more information about our TQM program.



**Leica ADS80**  
Product Brochure



**Leica RCD105**  
Product Brochure



**Leica FCMS**  
Product Brochure



**Leica FPES**  
Product Brochure



**Leica ALS60**  
Product Brochure

Laser class 4 in accordance with IEC 60825-1 resp. EN 60825-1

**Cover image**  
 Fitchburg, MA, June 2008 flown from 300 m AGL at 130 knots, with a 20-degree FOV, 85 Hz scan rate and 167 kHz pulse rate. Point density ~24 points/m<sup>2</sup>, average post spacing 21 cm.