NEW

RIEGL VQ®-780i

ALS

World Premiere at
INTERGEO 2017

5600m | 1 MHz

The new *RIEGL* VQ-780i is a high performance, rugged, lightweight, and compact airborne mapping sensor. This versatile system is designed for high efficient data acquisition at low, mid, and high altitudes, covering a variety of different airborne laser scanning applications from high density to ultra wide area mapping.

Based on *RIEGL's* proven Waveform-LiDAR technology, the system provides clutter-free point clouds with high accuracy, excellent vertical target resolution, calibrated reflectance readings, and pulse shape deviation for unsurpassed information content on each single measurement. The system is complemented with *RIEGL's* advanced acquisition and data processing software suite that utilizes parallel computing (GPU) for very fast data processing.

Waveform Processing Airborne Laser Scanner for Ultra Wide Area Mapping and High Productivity

Typical Applications

• Ultra Wide Area / High Altitude Mapping • High Point Density Mapping • Mapping of Complex Urban Environments • City Modeling • Glacier & Snowfield Mapping • Mapping of Lakesides & River Banks • Agriculture & Forestry • Corridor Mapping

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RIEGL®

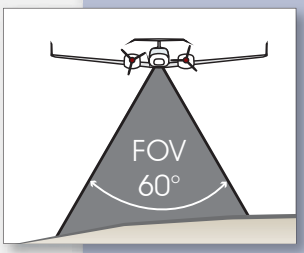
RIEGL LMS GmbH, Austria | *RIEGL USA Inc.* | *RIEGL Japan Ltd.* | *RIEGL China Ltd.*

RIEGL VQ®-780i Technical Data

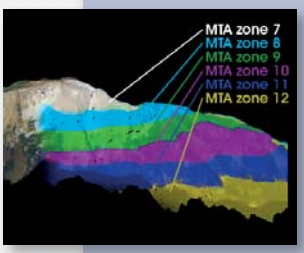
- max. operating flight altitude AGL
- pulse repetition rate PRR (burst)
- waveform data output
- waveform processing
- multiple target capability
- not intrinsically eye safe

eye safety class	Laser Class 3B*
max. range @ target reflectivity 60%	6,800 m
max. range @ target reflectivity 20%	4,500 m
minimum range	100 m
accuracy / precision	20 mm
effective measurement rate	up to 666,000 meas./sec
scan angle range	± 30 ° = 60°
max. operating flight altitude AGL	5,600 m / 18,300 ft

*Class 3B Laser Product according to IEC 60825-1:2014



broad effective swath width



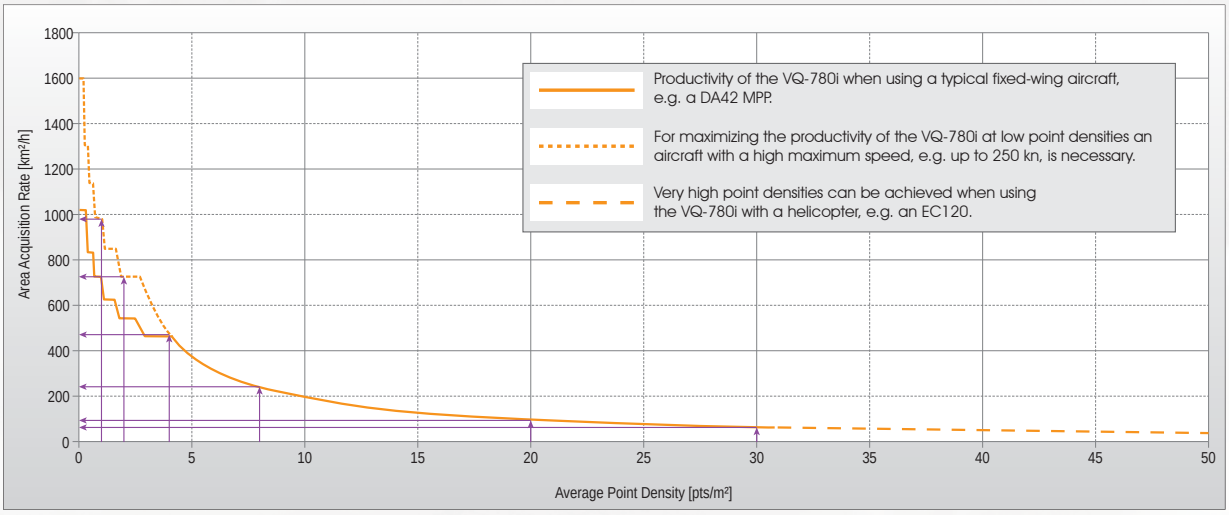
multiple time around processing for automatically resolving range ambiguities


ideally suited for ultra wide area mapping

Main Features

- online waveform processing as well as smart and full waveform recording
- excellent multiple target detection capability
- excellent suppression of atmospheric clutter
- Multiple-Time-Around (MTA) processing of up to 25 pulses simultaneously in the air
- high laser pulse repetition rate up to 1 MHz
- up to 666,000 meas./sec on the ground
- parallel scan lines and uniform point distribution
- high-speed optical data link to *RIEGL* data recorder
- interface for GNSS time synchronization
- seamless integration and compatibility with other *RIEGL* ALS systems and software packages

RIEGL VQ®-780i Productivity



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