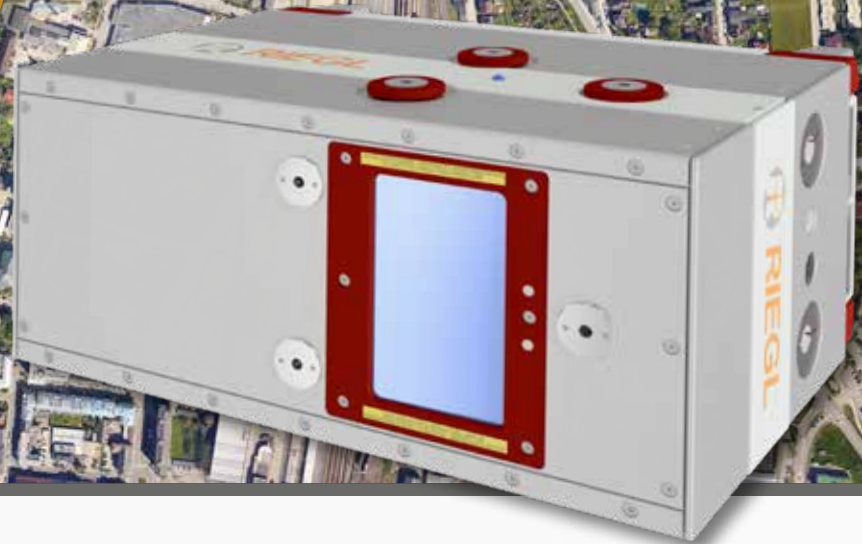


# RIEGL VQ<sup>®</sup>-780i



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 point clouds with high accuracy, excellent vertical target resolution, calibrated reflectance readings, and pulse shape deviation for unsurpassed information content on each single measurement. Excellent atmospheric clutter suppression yields clean point clouds with minimum efforts in filtering isolated noise points. The system is complemented with *RIEGL's* advanced acquisition and data processing software suite.



## 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





[www.riegl.com](http://www.riegl.com)





## RIEGL VQ®-780i Technical Data


- 

max. operating flight altitude AGL
- 

pulse repetition rate PRR (burst)
- 

waveform data output
- 

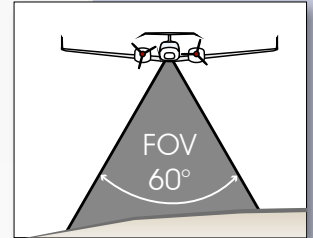
waveform processing
- 

multiple target capability
- 

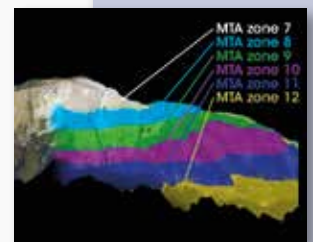
not intrinsically eye safe

<b>eye safety class</b>	Laser Class 3B*
<b>max. range @ target reflectivity 60%</b>	6,800 m
<b>max. range @ target reflectivity 20%</b>	4,500 m
<b>minimum range</b>	100 m
<b>accuracy / precision</b>	20 mm
<b>effective measurement rate</b>	up to 666,000 meas./sec
<b>scan angle range</b>	± 30 ° = 60°
<b>max. operating flight altitude AGL</b>	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
- interface for GNSS time synchronization
- seamless integration and compatibility with other RIEGL ALS systems and software packages

## RIEGL VQ®-780i Productivity

