

RIEGL VQ-1560i



The ultra-high performance, fully integrated and calibrated Dual Channel Airborne Mapping System *RIEGL VQ-1560i* is well prepared for fulfilling the challenging demands of even complex airborne mapping missions.

Based on *RIEGL's* sophisticated Waveform-LiDAR technology, the system is capable of online waveform processing as well as full or smart waveform recording, thus delivering highly informative scan data for post processing.

The system is equipped with a seamlessly integrated high performance IMU/GNSS system and an optional primary 100 megapixels RGB camera as well as a secondary thermal or a NIR camera.



Dual Channel Waveform Processing Airborne LiDAR Mapping System

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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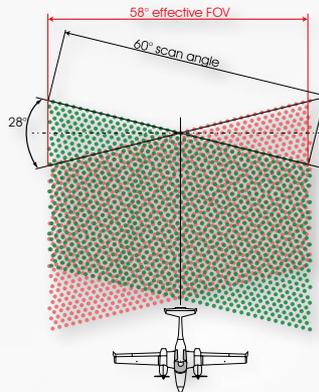
RIEGL VQ-1560i Technical Data

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%	5,800 m
max. range @ target reflectivity 20%	3,800 m
minimum range	100 m
accuracy	20 mm
effective measurement rate	up to 1.33 million meas./sec
scan angle / effective field of view	60° / 58°
max. operating flight altitude AGL	5,600 m / 18,300 ft

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

RIEGL VQ-1560i Scan Pattern



RIEGL VQ-1560i Installation Examples

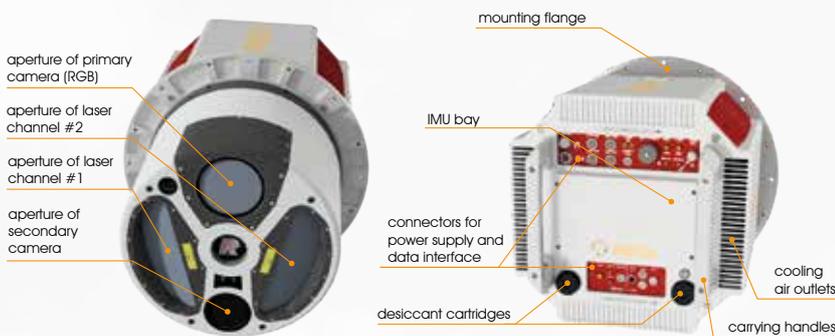


RIEGL VQ-1560i installed in the nose pod of fixed-wing aircraft DA42 MPP



RIEGL VQ-1560i installed on GSM-4000 gyro-stabilized platform to be used in a helicopter or fixed-wing aircraft

RIEGL VQ-1560i Elements of Function and Operation



RIEGL VQ-1560i-DW



enhanced target characterization based upon simultaneous measurements at green and infrared laser wavelengths

Main Features

- high laser pulse repetition rate up to 2 MHz (burst)
- unrivaled scan pattern for best point spacing on the ground
- multiple-time-around-processing for resolving range ambiguities automatically
- digitization electronics offering online waveform processing as well as full and smart waveform recording
- waveform processing technology enabling multiple-target detection capability
- innovative forward/backward scan angle for collecting data of vertical structures
- straightforward flight planning and increased flight safety
- integrated inertial navigation system and GNSS receiver
- fiber coupled high speed data interface to single RIEGL Data Recorder
- integrated 100 megapixel aerial medium format camera, prepared for integration of a secondary camera (optional)