

RIEGL VZ-2000i

- high laser pulse repetition rate of up to 1.2 MHz
- high speed data acquisition with up to 500,000 measurements/sec
- eye safe operation at Laser Class 1
- wide field of view 100°x360°
- range up to 2500 m, accuracy 5 mm
- high accuracy, high precision ranging based on echo digitization, online waveform processing, and multiple-time-around processing
- new, innovative processing architecture for data acquisition and simultaneous geo-referencing, in real-time
- automatic on-board registration
- **NEW** simultaneous image and scan data acquisition
- cloud connectivity via Wi-Fi and 3G/4G LTE
- fully compatible with the RIEGL VMZ Hybrid Mobile Laser Mapping System
- multiple target capability
- optional waveform data output
- orientation sensor for pose estimation
- remote control
- integrated GNSS receiver

Based on a future-oriented, innovative new processing architecture, internet connectivity, and RIEGL's latest waveform processing LiDAR technology, the RIEGL VZ-2000i Long Range 3D Laser Scanning System combines proven user friendliness in the field with fast and highly accurate data acquisition.

Its new processing architecture enables execution of different background tasks (such as point cloud registration, geo-referencing, orientation via integrated Inertial Measurement Unit, etc.) on-board in parallel to the simultaneous acquisition of scan data and image data. A full documentation of the scanner's software components – directly accessible on the RIEGL VZ-2000i – provides a sound basis for creation of your own python apps to enhance the scanner functionality. The system provides highest flexibility by supporting numerous peripherals and accessories such as the integrated GNSS unit for high accurate RTK solution, a SIM Card slot for 3G/4G LTE, WLAN, LAN, USB, and different other ports of external units.

RIEGL's unique Waveform-LiDAR technology – based on echo digitization, online waveform processing, and multiple-time-around processing – is the key to enabling such high speed, long range, high accuracy measurements even in poor visibility and demanding multi-target situations caused by dust, haze, rain, vegetation, etc.



Typical applications include

- Topography and Mining
- Natural Hazard Surveying
- Construction Site Monitoring
- Archeology & Cultural Heritage Documentation
- City Modeling
- Tunnel Surveying
- Civil Engineering
- Research

visit our website
www.riegl.com

