

Rain and Haze Penetration

Using deviation and reflectance filters, range measurements caused by rain drops and haze can be identified, selected, or deleted, resulting in a clear and clean point cloud of the relevant scene.



scanning in the rain



point cloud before filter application



automatically cleaned-up point cloud

VZ-400i – a NEW Standard in User-Friendliness

Operation & Remote Control

- >> Easy Operation of the RIEGL VZ-400i with the integrated Graphical User Interface (GUI) via touchscreen.
- >> Remote control via RIEGL VZ-i Series App on your device. The GUI of the laser scanner will be displayed on the screen of your smart device. Connect locally or from anywhere in the world.

The App is available for iOS (iPhone, iPad, iPad Touch), Android and Windows PC (32 and 64 Bit).



Download now!



RIEGL VZ-i Series App

Scanner Motion Detection

Several pre-defined data acquisition workflows (e.g. Default, Forensics, OneTouch) are available. These **pre-defined workflows** allow the operation of the scanner by pushing just one icon on the screen per scan position. Once the tripod is re-arranged, a new scan position will automatically be generated. Modifications or creations of individual workflows to meet user specific requirements are possible.



select the appropriate scanning parameters and start the first scan



move the scanner to the next scan position



to start the next scan just press the START-button

User Applications

User developed applications (written in python software language) for further improvement of processing of surveying missions can be uploaded into the scanner.



RIEGL VMZ Hybrid Mobile Laser Mapping System

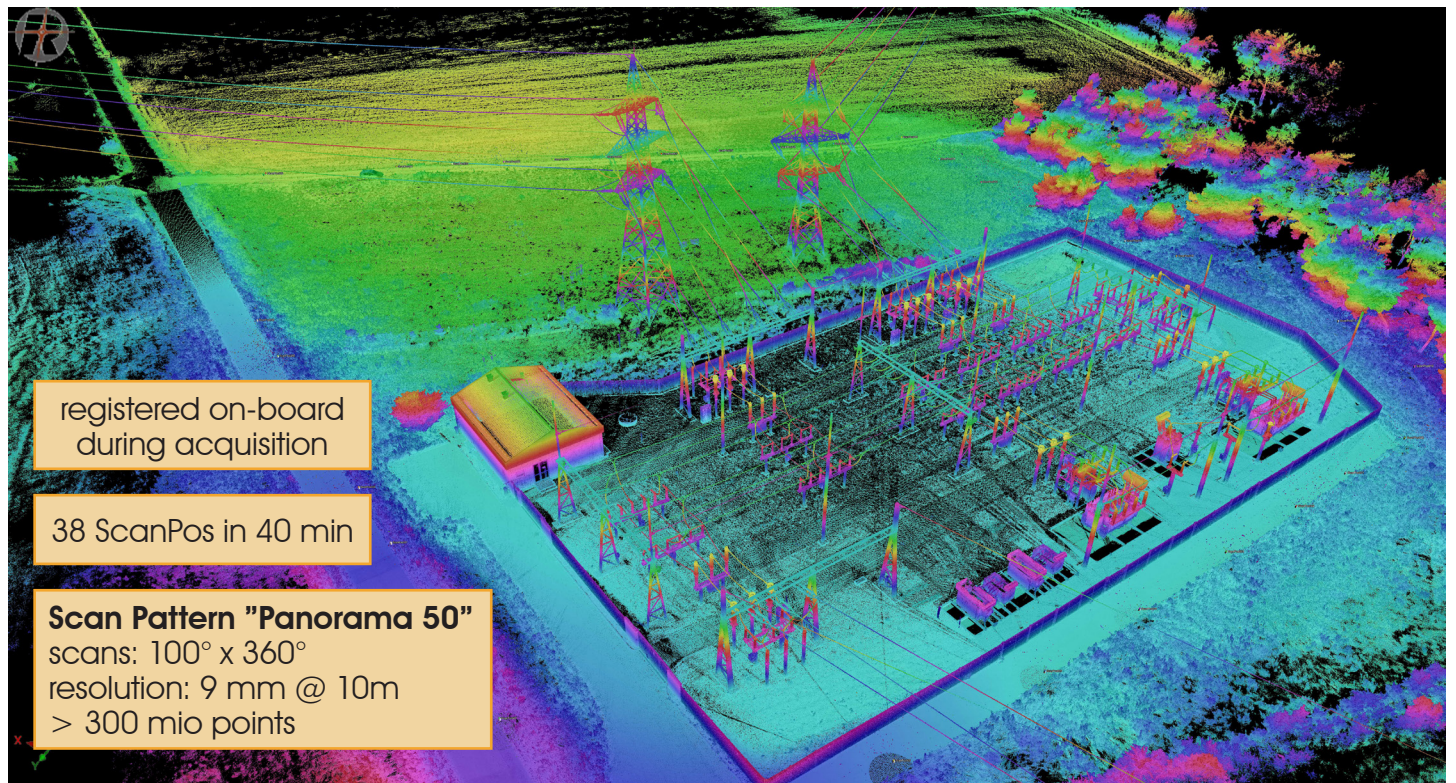
Mobilization of the RIEGL VZ-400i

The RIEGL VMZ Hybrid Mobile Laser Mapping System with fully integrated IMU/GNSS unit supports the VZ-400i scanner for kinematic data acquisition. A well proven platform design enables quick transition from mobile to terrestrial applications, and vice versa, without losing system calibration. Flexible installation options and fully integrated optional cameras complement this user-friendly solution.



Automatic On-board Registration

Matching point clouds of different scan positions (registration), has always been one of the most time-consuming tasks during the post processing of 3D scanning projects.



Scan data of a power plant, height scaled with grayscale overlay based on reflection

With two processors on-board, the *RIEGL VZ-400i* is able to perform different processes in real-time such as automatic on-board registration in parallel to the scan data acquisition.

Processor 1

- scan data acquisition
- simultaneous acquisition of photographs during scanning
- pose estimation (using GNSS/IMU/environment sensors)

Processor 2

- conversion of scan data into *RIEGL* data base
- on-board multiple time around resolution
- registration of scan data as a background process



RIEGL RiSCAN PRO / RiSOLVE Software

RiSCAN PRO / RiSOLVE enables a fully automatic registration and colorization of scan data. This stream-lined process enables an efficient and fast workflow to acquire, register and colorize 3D scan data. With additional tools for filtering, scene animation and measurements, a rapid turnaround of critical information is enabled.