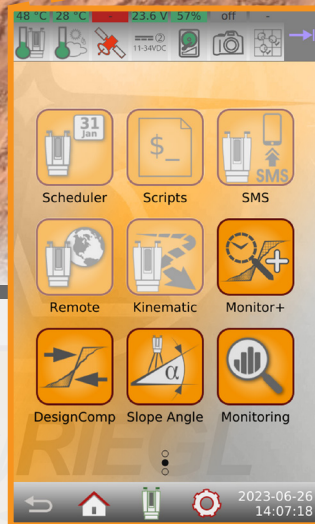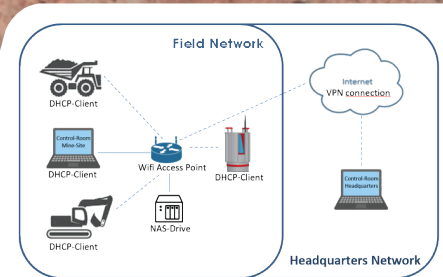# *RIEGL* Monitoring Apps

Real Time Analysis & Processing of VZ-i Data

Monitoring and Remote Operation are the keywords of our time. The *RIEGL* VZ-i Series terrestrial laser scanners are ready to meet these demanding challenges.

RIEGL presents four easy-to-use and intuitive monitoring apps that will support users in their daily work, especially in critical situations. Based on reliable real-time data, necessary decisions can be made promptly on a sound basis.

RIEGL's 3D terrestrial laser scanners can smoothly be integrated in any network infrastructure by using LAN, Wi-Fi, and LTE-interfaces, which enables fully remote operation of the scanners. With the installation of customized apps for automatic data acquisition and data processing, the user gets automatic real-time results without any user interaction.

NEW *RIEGL* Monitor+ App

RIEGL Monitoring App

RIEGL Design Compare App

RIEGL Slope Angle App

RIEGL ®

Users receive final results of the apps via the web browser on any device, which is connected to the network, in which the scanner is operated. No software installation or processing of the data is necessary. Everything is processed automatically within the app on the scanner.

NEW RIEGL Monitor+ App

In addition to the standard Monitoring App (see below), the Monitor+ App allows interrupting the monitoring process, removing the scanner, and later proceeding with monitoring. Thus, Permanent Monitoring, but also Periodic and even Sporadic Monitoring are possible. Prism/target monitoring as known from robotic total stations is also implemented. The Monitor+ App offers users full flexibility in one single application by integrating the functionalities of the Design Compare App and the Slope Angle App. Optional image acquisition is also provided to facilitate the interpretation of the surface. The user can define different areas of interest with different data acquisition schedules. The configuration of the Monitor+ App is assisted by a configuration wizard, available within RiSCAN PRO.
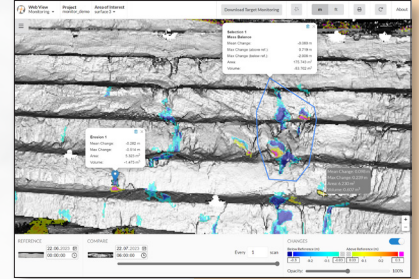
RIEGL Monitoring App

Change detection is calculated to a given reference scan. This allows to detect movements of e.g., landslides long before this is visible to the human eye. The interpretation of the movements through a time series of scans allows the prediction of a possible slope failure. It ensures to have enough time to evacuate people and to remove machinery from the endangered areas.
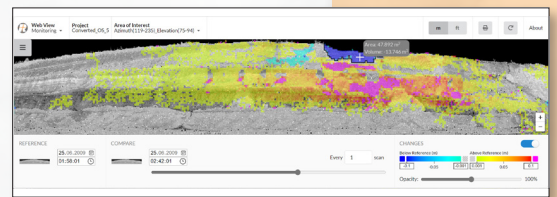
RIEGL Design Compare App

Overcut and undercut are calculated based on a given design model. While undercut is a waste of money, overcut can involve major safety risks. With the use of this app, the operation of heavy equipment such as digging machines can be optimized to streamline the mining process.
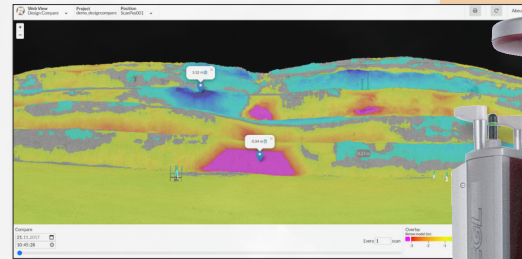
RIEGL Slope Angle App

Slope angles are calculated automatically from scan data. Critical slope angles can be highlighted and are provided to the user, e.g., the operator of loaders. The real-time information helps them to keep the slope angles of stockpiles and dump areas within the defined limits.

NEW Monitor+ App
permanent, periodic, and sporadic monitoring of surface and targets/prisms in one

Monitoring
data comparison and visualization of differences to a reference data set

Design Comp
data comparison to a given 3D design model, visualization of undercut and overcut

Slope Angle
calculation and visualization of local slope angles and the areas above the critical slope angle

slope failure

α

MONITORING APPS

www.riegl.com

RIEGL®