RiACQUIRE

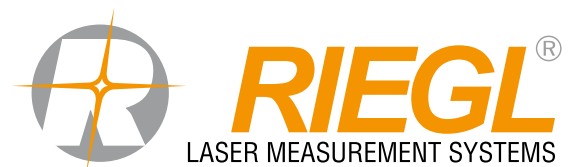## for *RIEGL* Airborne & Mobile Scanner Systems

- *project-oriented scandata acquisition and scanner control*

- *online visualization of geo-referenced monitoring data during acquisition*

- *quality assurance with detailed history of events, system parameters and operator´s interactions*

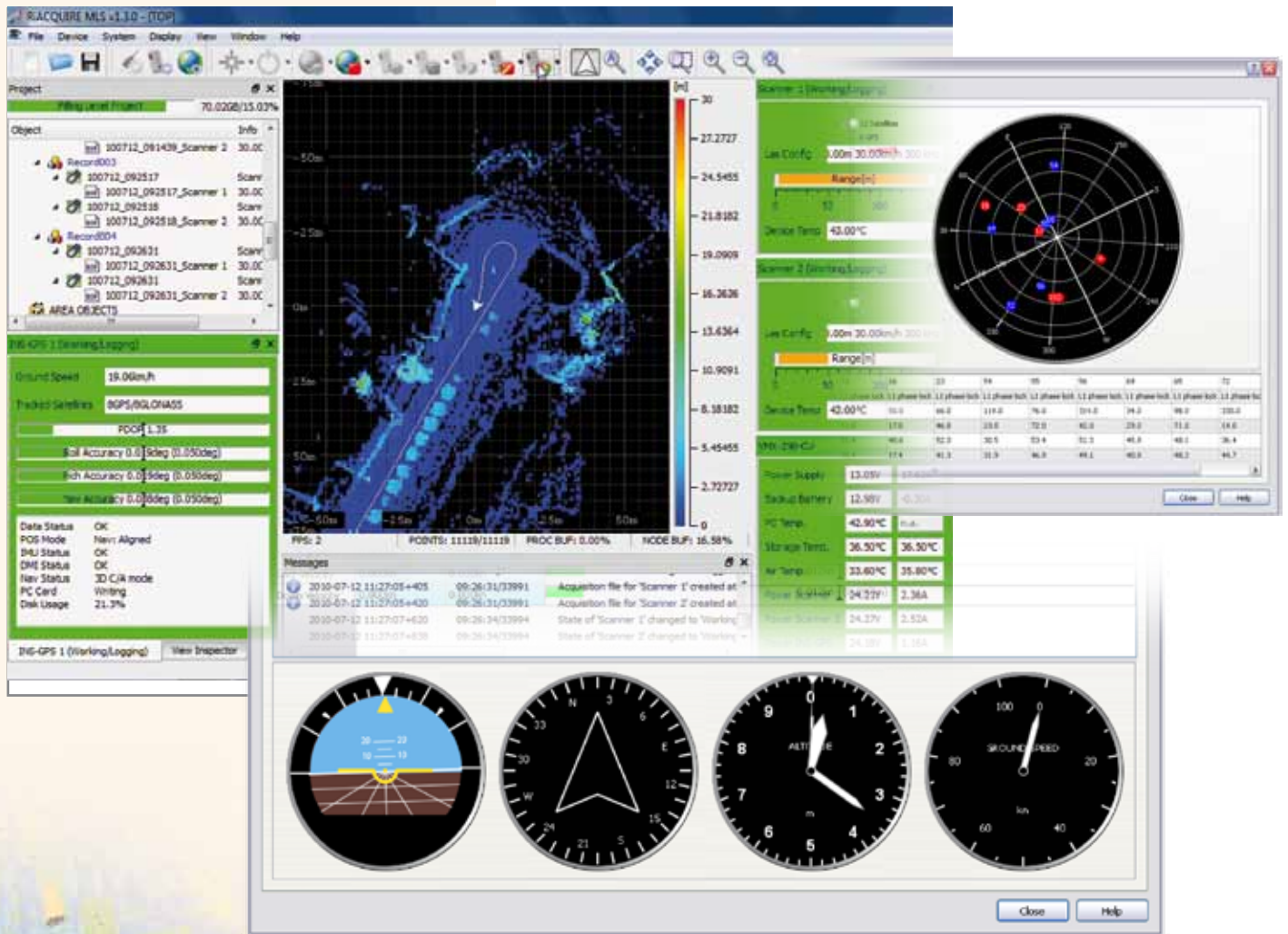- *status feedback for fast recognition by the operator*

RiACQUIRE covers a wide variety of tasks present in *RIEGL*'s mobile and airborne laser scanning systems. Both, mobile and airborne systems comprise at least one laser scanner, a position and attitude measurement system, and an operator's work station. Many systems further comprise camera sub-systems, additional laser scanners, mass data storage devices, and mechanical subassemblies.

The tasks covered by RiACQUIRE are allocated to the phases of system integration, system verification & testing, and operational data acquisition.

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www.riegl.com

RIEGL®
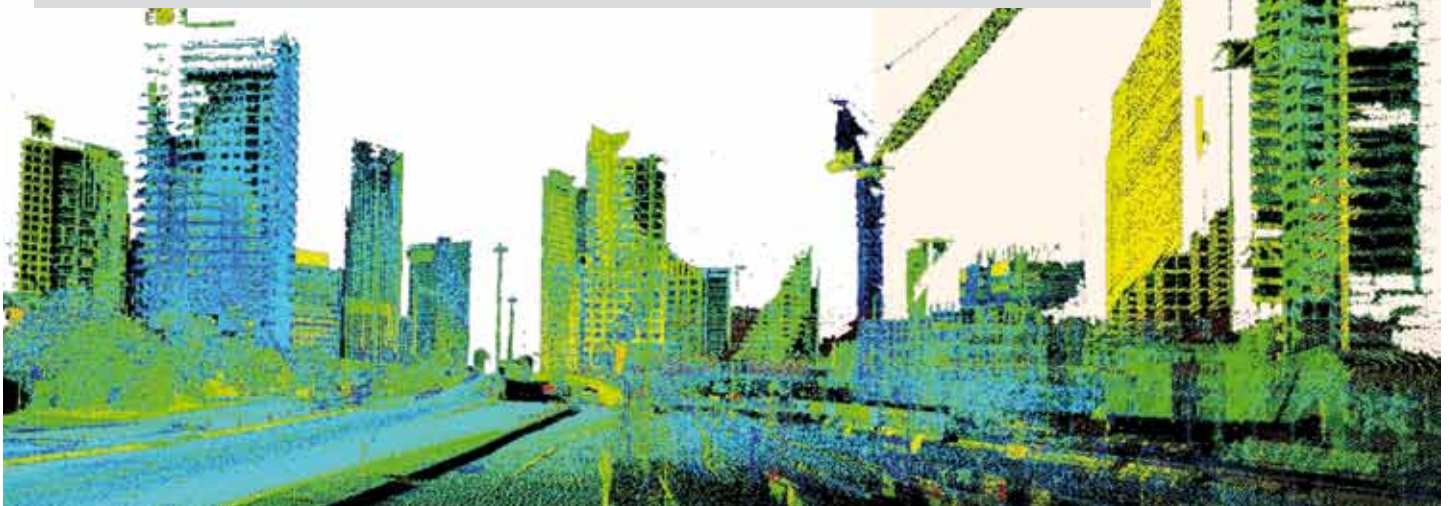LASER MEASUREMENT SYSTEMS

Ri Software

An easy to use but powerful interface enhances communication with the supported *RIEGL* laser scanners. With the aim of reducing the work-load for the system operator, only the most relevant information is displayed and tasks can be executed semi-automatically. Scanning parameters are easily changed by choosing a predefined parameter set. The graphical user interface takes into account the difficult working conditions inside the aircraft, vessel or vehicle by providing large control buttons, easily pushed even in turbulent conditions.

To assure data quality RiACQUIRE is able to collect monitoring data from the laser scanner and online data provided by the INS/GNSS system. RiACQUIRE provides visual information about the actual measurements from the INS/GNSS system to easily check the plausibility of the results. A continuous recording of system status, INS/GNSS attitude and position, and all the interactions of the operator with RiACQUIRE, provides a detailed history of the survey mission, which is stored for analysis and documentation later on.

System Integration	Verification Testing	Operational Data Acquisition
• identification of system components • definition of interfaces and protocols • configuration of system components	• verification of cabling and communication • verification of configuration • logging of warning and error messages • logging of communication • checking of consistency of project data prior to survey	• acquisition and storage of data • management of mass data storage • visualization of system status and navigation information • analysis and visualization of on-line data

RiACQUIRE Key Features

- *Controlling RIEGL airborne and mobile laser scanners semi-automatically or manually*

- *Supported RIEGL Laser Scanners: LMS-Q680(i), LMS-Q560, LMS-Q240(i), LMS-Q120(i)(ii), LMS-Z420i, LMS-Z620, and RIEGL V-Line Laser Scanners*

- *Generic support of digital cameras*

- *Supported INS/GNSS Systems: IGI AEROcontrol, Applanix POS AV/LV/MV, OxTS RT Family, GGS AeroDIDOS, IXSEA AIRINS/LANDINS, NovAtel SPAN*

- *Highly simplified system status feedback for fast recognition by the operator*

- *Easy access for the operator to configure system parameters*

- *Quality assurance with a detailed history of events, system parameters and operator's interactions stored for analysis later on*

- *Monitoring data via UDP, TCP, and RS232 Interface*

RiACQUIRE System Requirements

Tested operating systems:	Microsoft Windows XP, Microsoft Windows Vista, Microsoft Windows 7 Linux Ubuntu/Kubuntu (tested with version 9.04, 9.10, 10.04) Linux openSUSE (tested with version 11.1) Linux Debian (tested with version 5.0) other Linux distributions or versions may also work but have not been tested
Memory requirements:	512 MB RAM minimum
Disk space requirements:	approx. 40 MB on Windows and approx. 215 MB on Linux free disk space for the program
Interfaces:	Network interface (ethernet, LAN) with 100MBit for V-Line scanners 1GBit recommended Serial interface RS232 (for some INS-GPS or camera trigger)
Graphics requirements:	Screen resolution at least 1024 by 768 pixels 32 MB Memory minimum, 64 MB or more recommended OpenGL driver 1.2 or higher
Peripherals:	Pointing device like a mouse, touchpad, trackball or touchscreen, standard keyboard

RiACQUIRE Download Information

To download RiACQUIRE please navigate to http://www.riegl.com/ and click on „DOWNLOADS".
(Download after e-mail registration only.)

RIEGL ®
LASER MEASUREMENT SYSTEMS

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