

# LMS-Q680i

System Configuration 12/10

# Scanner Basic Configuration

Part-No, HW-Q680-01-000-01

#### Long-Range Airborne Laser Scanner **RIEGL LMS-Q680i for Full Waveform Analysis**

Part-No. HW-Q680-00-000-01

- Laser transmitter & receiver front end
- Motorized mirror scanning mechanism
- Signal processing electronics
- Internal power supply electronics, input voltage 18-32 V DC

Detailed specifications and laser classification according to the latest datasheet LMS-Q680i.



### Interfaces, integrated

- TCP/IP Ethernet Interface, providing smooth integration of the LMS-Q680i data into a 10/100 MBit/sec, twisted-pair (TP) Local Area Network (LAN). The interface acts as a server allowing remote configuration, commanding, and online data acquisition of monitoring data via a platformindependent TCP/IP Ethernet Interface
- High speed interface to data recorder for acquisition of digitized waveform and scan data
- Synchronization input to GPS receiver, Serial interface RS232 and TTL input for PPS pulse
- Serial interface RS232, alternatively for configuration if no LAN is connected

### **Cables**

- Part-No. HW-QXX-03-002-00 Power Supply Cable, 12 pole connector, 4 m
- TCP/IP Cable M12-M12, 3 m • Part-No. HW-GP-03-000-00
- Part-No. HW-GP-03-002-00
  - TCP/IP Cable M12-RJ45, 0.3 m
- Part-No. HW-GP-03-003-00
  - TCP/IP Cable M12-RJ45 cross over, 0.3 m Serial Data Cable, RS232, 3 m
- Part-No. HW-GP-03-026-00 • Part-No. HW-GP-03-026-00
  - Serial Data Cable to GPS, RS232, 3 m
- Part-No. HW-GP-03-024-00
- PPS Cable to GPS, BNC connector, 3 m

## RiScanLib-2D Library Part-No. SW-GP-02-027-00

For straightforward implementation of data acquisition in user applications, based on COM technology, including demo program RiSCAN2D for commanding and monitoring data acquisition and display with C++ source. 1 license bundled with serial number of scanner.

- Examples in Visual C++ and Delphi
- For operating systems WINDOWS XP Professional (recommended), WINDOWS 2000 SP2 or above

#### Software Maintenance for 12 months Part-No. SW-GP-12-012-00

- Free software updates
- E-mail and telephone support

#### User's Manual (in English language)

"Technical Documentation & Operating Instructions" including, between other things, instructions for: Safety, Installation, Operation, etc.

Information contained herein is believed to be accurate and reliable. However, no responsibility is assumed by *RIEGL* for its use. Technical content subject to change.



## **Scanner Hardware Option**

### SCAN SYNC Scanner Rotation Synchronization Part-No. FW-QXX-02-001-00

for synchronizing scan lines to external timing signal

- Synchronization of the data acquisition of a single laser scanner or several laser scanners to an external event pulse, typically the PPSsignal of a GPS receiver, whereas this event pulse can be fed to other units of a data acquisition system for synchronized operation (e.g. a camera is triggered with start of a scan line).
- Increasing the data acquisition speed by operating several laser scanners, as in some data acquisition systems the acquisition speed of a single laser scanner may be not sufficient. Operating several laser scanners scanning the same angular range requires the scanners to be synchronized to achieve a well-defined scan pattern and to avoid interference between the scanners.

# **Further Accessories**

#### Heavy-Duty Carrying Case CC-Q680(i) Part-No.HW-Q680-05-000-00

with 4 hinged handgrips and wheels, splash-water proof, foam lined to fit shape of laser scanner, cables etc., dimensions 820 x 520 x 290 mm