

## Basic Configuration Package

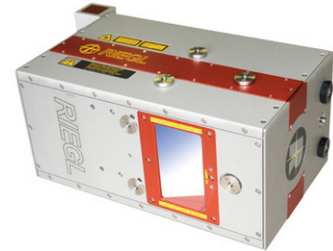
### **Scanner Basic Configuration for RIEGL LMS-Q780**

Part-No. HW-Q780-01-000-00

### **Long-Range Airborne Laser Scanner RIEGL LMS-Q780 for Full Waveform Analysis**

(Part-No. HW-Q780-00-000-00)

- 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-Q780.

### **Interfaces, integrated**

- TCP/IP Ethernet Interface, providing smooth integration of the LMS-Q780 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 platform-independent 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**

- Power Supply Cable, 12 pole connector, 4 m  
(Part-No. HW-QXX-03-002-00)
- TCP/IP Cable M12-M12, 3 m  
(Part-No. HW-GP-03-000-00)
- TCP/IP Cable M12-RJ45, 0.3 m  
(Part-No. HW-GP-03-002-00)
- TCP/IP Cable M12-RJ45 cross over, 0.3 m  
(Part-No. HW-GP-03-003-00)
- Serial Data Cable, RS232, 3 m  
(Part-No. HW-GP-03-026-00)
- Serial Data Cable to GPS, RS232, 3 m  
(Part-No. HW-GP-03-026-00)
- PPS Cable to GPS, BNC connector, 3 m  
(Part-No. HW-GP-03-024-00)
- Connection Cable for Laser Safety Box, 5m  
(Part-No. HW-QXX-03-011-00)

### **Laser Safety Box**

(Part-No. HW-VXX-03-017-00)

### **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.

***The RIEGL LMS-Q780 Airborne Laser Scanner is classified as a Laser Class 3B instrument in compliance with the International Standard IEC60825-1:2007, it is required by national and international regulations to strictly obey the respective safety instructions according to Laser Class 3B. Even short-time exposure to the laser radiation of a Laser Class 3B instrument is hazardous and can cause permanent damage to the human eye.***

***Information on the NOHD (Nominal Ocular Hazard Distance) and ENOHD (Extended Nominal Ocular Hazard Distance) is given by the scanner's user's manual. Nevertheless, operational safety for operators, pilots, and third persons on ground remains within the sole responsibility of the operating company as well as the system operator.***

## **RIEGL Option(s)**

### **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 PPS-signal 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 scanner, 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.

## **Recommended Accessories**

### **Heavy-Duty Carrying Case CC-Q780**

Part-No. HW-Q780-05-000-00

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