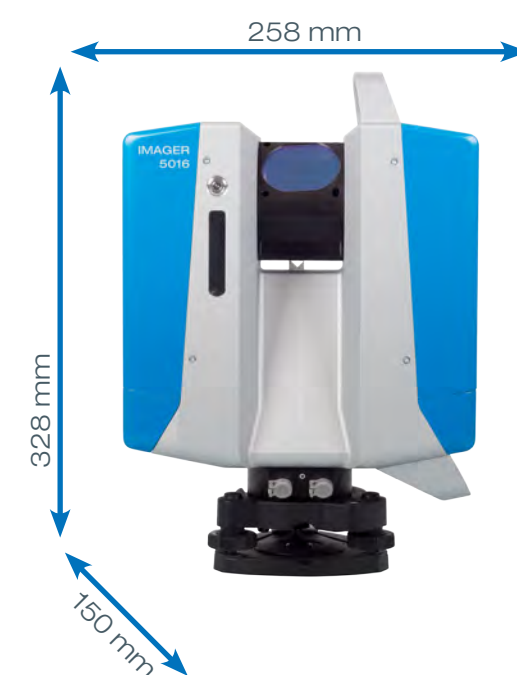


Z+F IMAGER® 5016 / Innovative Design

Dimensions



- Usable in smallest spaces
- Carry-on luggage size
- Hand baggage size

Weight

- Scanner without battery: 6.5 kg (14.3 lbs)
- Scanner with 2 batteries: 7.5 kg (16.5 lbs)
(hot swappable batteries, operating time 5h)
- Ideal weight for stable setup

Housing

- Ergonomic streamline design
- Additional grip with two handles
- Makes setups with high tripods or overhead applications easy



Protection class IP 54, protection against splash water and dust



Operation temperature -10 °C ... +45 °C (14°F ... 113°F)



Visual feedback by illuminated power switch



Easily accessible plugs for external power supply or ethernet data exchange

Head office - Germany

Zoller + Fröhlich GmbH
Simoniusstrasse 22
88239 Wangen im Allgäu
Germany

Phone: +49 7522 9308-0
Fax: +49 7522 9308-252

www.zf-laser.com | info@zf-laser.com

Subsidiary - UK

ZF UK Laser Limited
9 Avocado Court
Commerce Way
Trafford Park
Manchester M17 1HW
United Kingdom

Phone: +44 161 8717 050
Fax: +44 161 3125 063

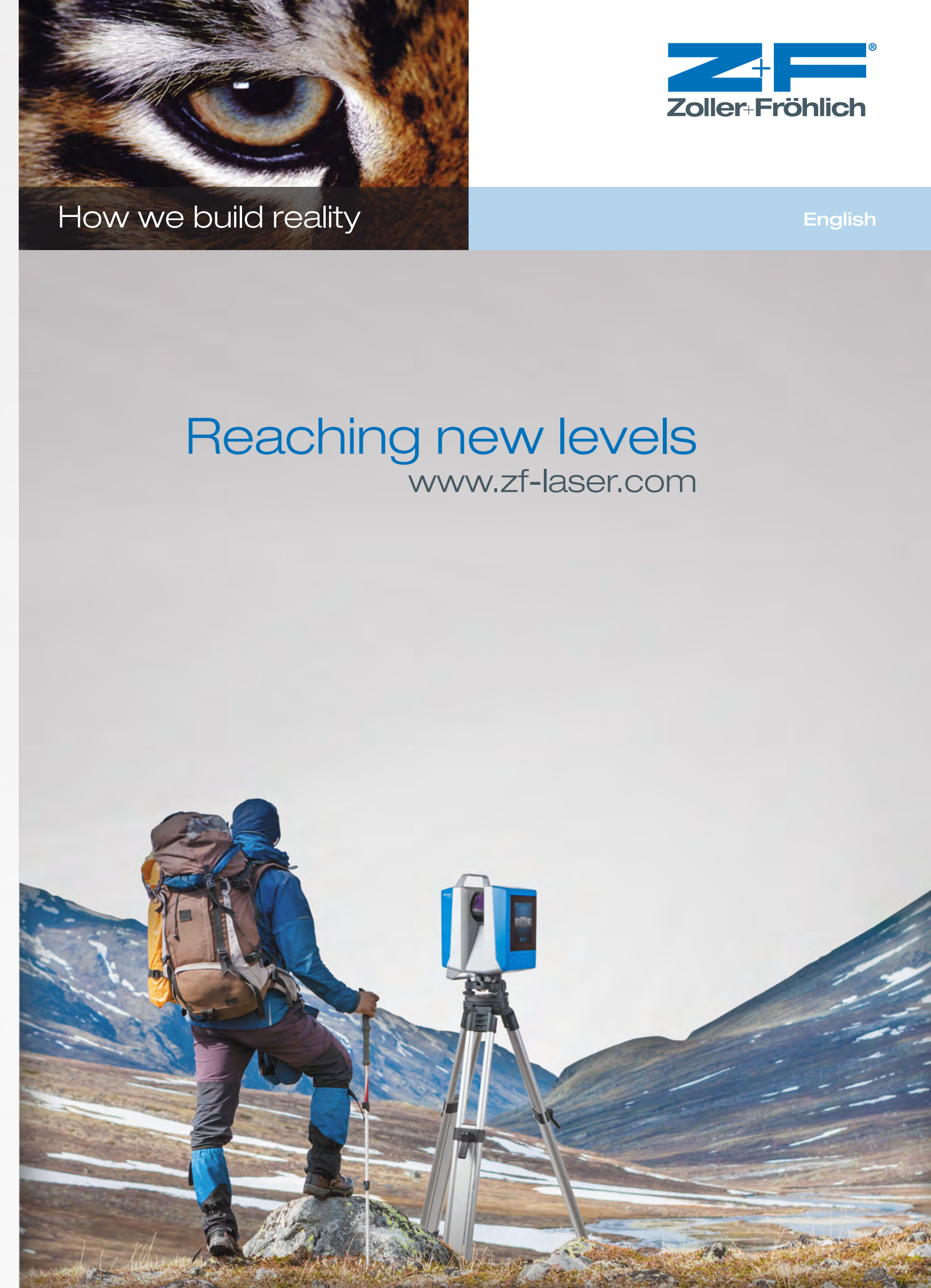
www.zf-uk.com | info@zf-uk.com

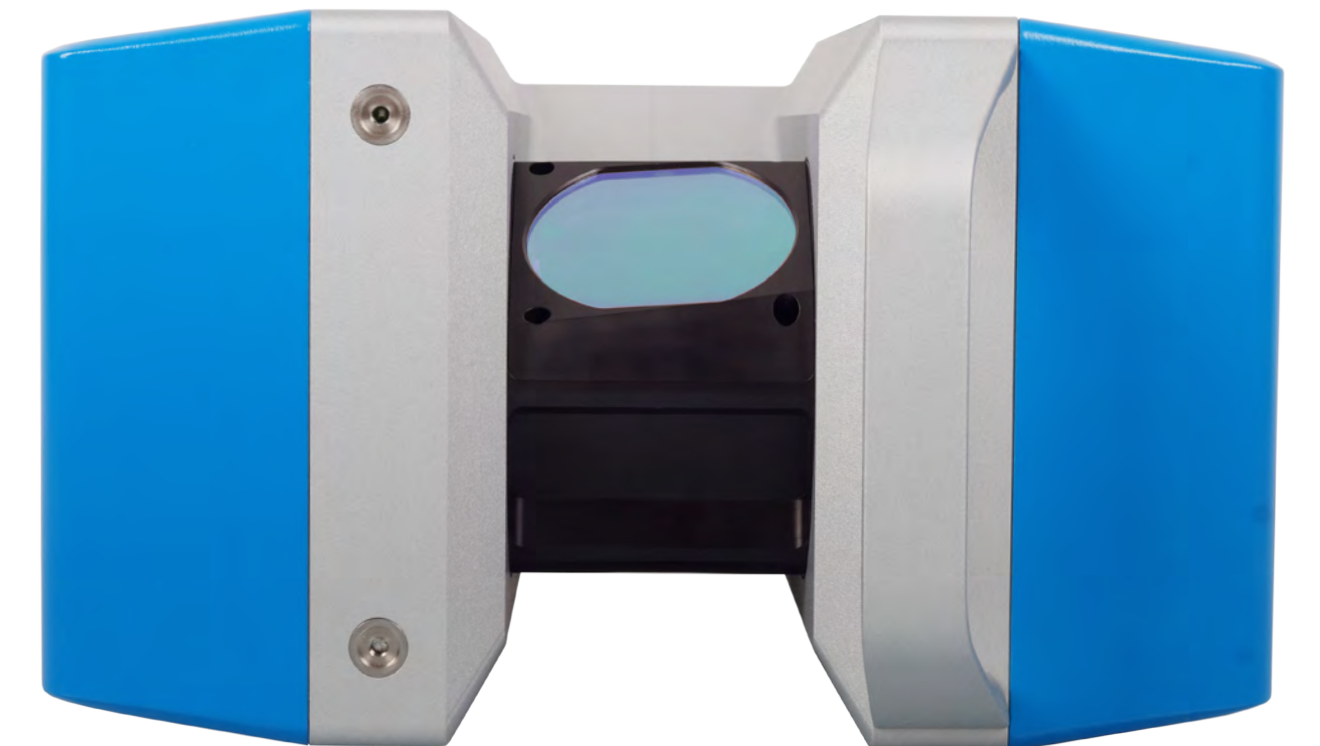
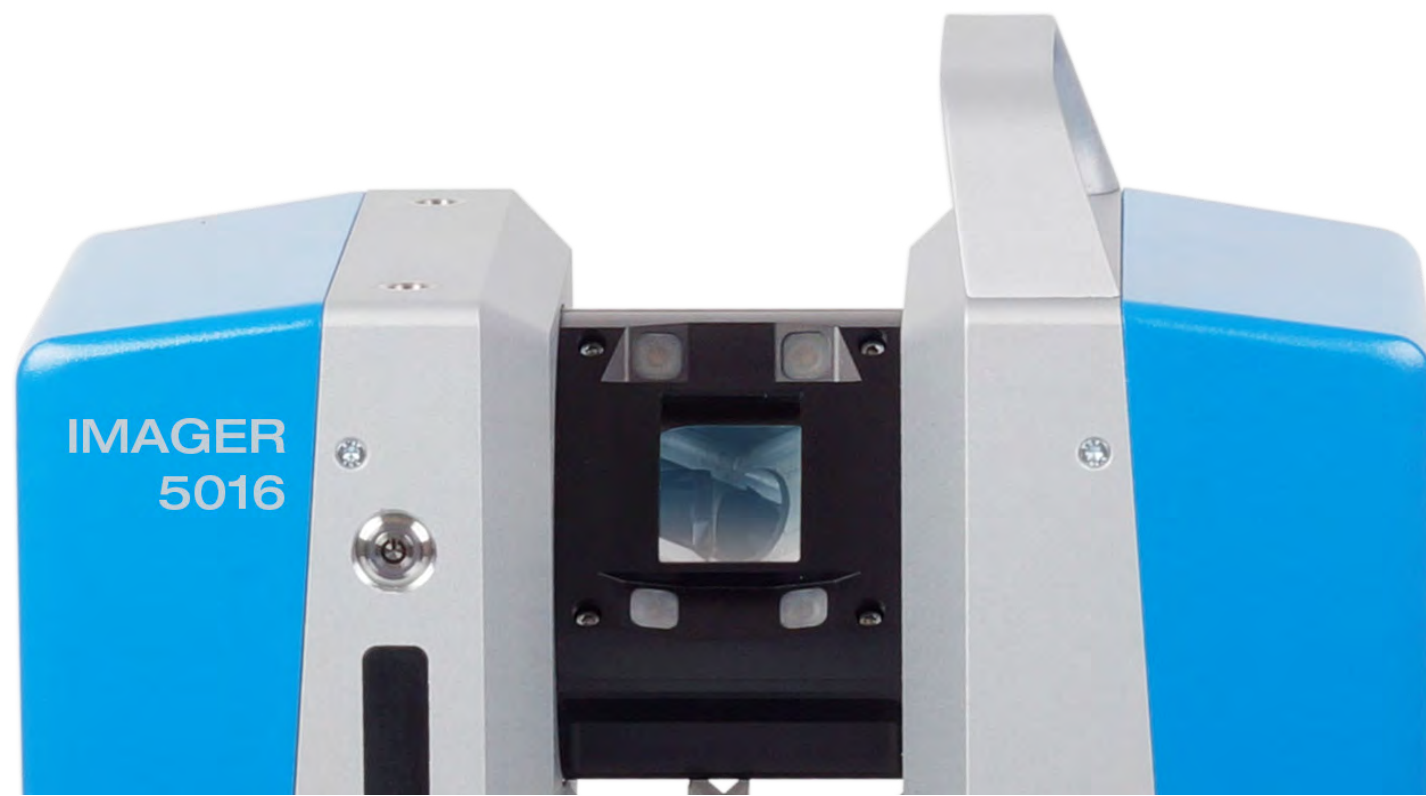
Subsidiary - USA

Z+F USA, Inc.
700 Old Pond Road
Suite 606
Bridgeville, PA 15017
USA

Phone: +1 412 257 8575
Fax: +1 412 257 8576

www.zf-usa.com | info@zf-usa.com





Z+F IMAGER® 5016 / Laser Scanner

Reaching new levels

The Z+F IMAGER® 5016 combines compact and light-weight design with state-of-the-art laser scanning technology - allowing the user to reach new levels. The phase-based laser scanner is equipped with an integrated HDR camera, internal lighting and positioning system resulting in even better scanning results and a more efficient workflow.

Technical features

Due to innovative developments, the maximum range of the new Z+F IMAGER® 5016 has been extended to up to **360 m (1,180 ft)** - thus establishing new opportunities and applications. The maximum measurement rate of more than **1 Mio. points/sec.** guarantees highly accurate results even with long distances.

Its **360° x 320° field-of-view** assures great coverage of the scanned area, reducing the number of necessary scan positions to a minimum. The scanner is classified as „eye-safe“ according to **laser class 1** and can therefore be used in public areas without any restrictions.

The Z+F IMAGER® 5016 is equipped with an integrated positioning system, which allows the automatic registration in the field, with or without targets. All preprocessing tasks can be taken care on the fly, increasing efficiency. The positioning system supports different satellite systems such as GPS & Glonass.

In addition, the scanner comes with an integrated HDR camera, which allows the user to quickly capture colour information - even in challenging lighting conditions.

Rapid picture capturing

Capturing colour information is very important in many fields of application. Generating a **full HDR panorama (80 MPixel)** only takes about 2:00 min. Combined with quick scanning times, this allows the user to rapidly generate geometric and colour data.

Integrated LED spots

The HDR camera of the Z+F IMAGER® 5016 is equipped with **integrated LED spots**, which grant additional flexibility when scanning. No more external lighting sources are necessary when capturing images in dark environments.

Internal data storage and data transfer

The scanner has internal storage capacities for **128GB** of data. Data can rapidly be transferred either by using the **SD-card slot**, ethernet link or WiFi connection. The **WiFi** operates to the **802.11a/n/g standard** and in the frequency range of **2.4GHz / 5GHz**.



Z+F IMAGER® 5016

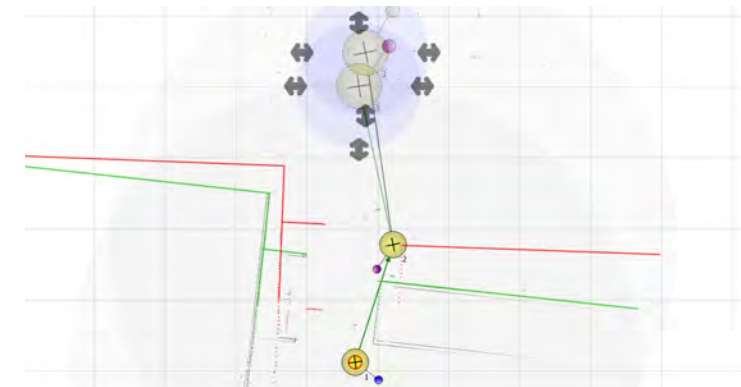
Z+F IMAGER® 5016 / Real-Time Registration

blue workflow®

Together with the **positioning sensors inside the Z+F IMAGER® 5016**, Z+F LaserControl® Scout is able to automatically place and register your scan data during your field work - on the fly.

Automatic registration

Z+F LaserControl® Scout keeps a constant link to the scanner. After a scan is finished, the data is downloaded onto the tablet PC automatically. Once completed, the software immediately attempts a preliminary registration. If the automatic process is not possible, Z+F LaserControl® Scout provides easy tools for manual adjustments by simply dragging the scan into the approximate position. Scout further provides a new tool for complex geometries to manually align scans quickly in 3D.



Automatic registration - on the fly

Registration Guard

One of the most common reasons for frustrations with cloud-to-cloud based registration algorithms is poor overlap between different scanning positions. Realizing such a problem in the office can be fatal to a project. Hence, Z+F LaserControl® Scout will assist you with early

detection of these problems in the field already, in order to fill gaps immediately with additional scans.

Brand new look and feel

Z+F LaserControl® Scout is optimized for Windows® touch tablets. Its intuitive user-interface is simple to use and has all major tools always at hand for you.

Stay updated through advanced synchronization

Z+F LaserControl® Scout will automatically synchronize all scan data locally and, after registration, update all scans on the scanner accordingly. Therefore, at any time, the scanner and tablet display the same results.

Remote Scanner Control

Free yourself of time pressure to hectically hide from the scanner. Control the instrument and check its status comfortably from a distance.



Remote control and synchronization

Quick insights with detailed top view profiles

Z+F LaserControl® Scout will create a detailed top-view, outlining the features in the scene for easy orientation and verification of the positioning.

Multi-Scanner Feature

The blue workflow® is further enhanced by using multiple scanners in parallel, working on the same project.

With the multi-scanner approach, all scan teams work on the same project file and the tablet is used to synchronise the projects between multiple scanners. There are two main workflows available: Single and Multi-Tablet Mode.

Single Tablet Mode

Imagine there are two scanning teams and a project coordinator on site. Each team operates their own scanner. The project coordinator has a tablet and stays with team A for a while, downloads their scans, checks the registration and synchronises the results back to the scanner of team A.



Single-Tablet Mode

Then the coordinator joins team B and downloads their scans, which they collected in the meantime, and joins those scans with the data of team A, checks the registration and synchronises the results back to scanner B. Now, the registered scan positions of scanner A are also available on scanner B. Then the coordinator moves back to team A and downloads the newly collected scans of scanner A, then B again and so on, back and forth.

Multi Tablet Mode

In another scenario, each team has their own tablet to do the registration while scanning. There is no dedicated coordinator present on site. Every now and then, e.g. during a lunch break or at the end of the working day, the operator of team A quickly connects to the scanner of team B, downloads their data and uploads his own registration to scanner B.



Multi-Tablet Mode