

- when it has to be **right**

Leica
Geosystems

Leica Geosystems Release Notes

Product Leica RTC360 and RTC360 LT
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Leica RTC360 3D Laser Scanner - Firmware v4.0



These Release Notes contain important information about the new Leica RTC360 firmware v4.0.

The new firmware can be obtained from your local Leica Geosystems Selling Unit or can be downloaded from the myWorld @ Leica Geosystems customer portal: <https://myworld.leica-geosystems.com>



WHAT'S NEW

1. Scan file size reduction

The file size of 3D scan data has been reduced by one third (see table 1). This results in smaller scan projects, more space for projects on the USB stick and faster file transfer.

File Size Scan Data [MB] per Setup				
Resolution	Points Hz x V	FW2.0	FW4.0	Reduction
Low	2083 x 5084	63	40	-36%
Medium	4166 x 10168	223	151	-32%
High	8333 x 20334	872	587	-33%

Table 1: File size of scan data per setup

The file size of 3D scan data can vary depending on the scanned scene. For outdoor scene the reduction rate can be up to 50%.

2. Image file size reduction

The file size of images has been reduced by one third (see table 2). This again results in smaller scan projects, more space for projects on the USB stick and faster file transfer.

File Size Scan and Image Data [GB] per Setup			
Resolution	FW2.0	FW4.0	Reduction
Low	448	296	-34%
Medium	608	408	-33%
High	1257	849	-32%

Table 2: File size of scan and image data per setup

The file size reduction of spherical images can vary depending on the light conditions of the scanned scene.

3. Adaptive image resolution

In the **Settings** menu a new option **Adaptive Resolution** has been added (see figure 1).

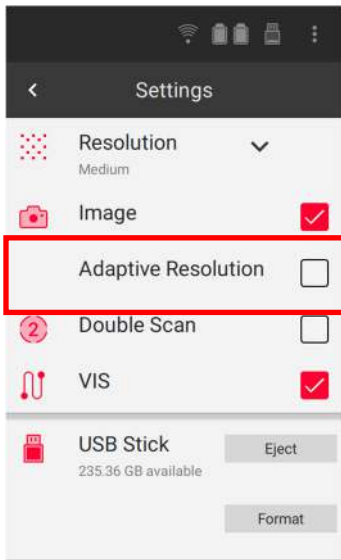


Figure 1: Adaptive Image Resolution

With this setting enabled the image resolution is adapted dynamically depending on the selected scan resolution. The lower the scan resolution the higher the image size reduction.

With this setting disabled the full image resolution is used for any selected scan resolution.

File Size Scan and Image Data [GB] per Setup			
Resolution	FW4.0 Full Image Resolution	FW4.0 Adaptive Image Resolution	Reduction
Low	296	92	-69%
Medium	408	373	-9%
High	849	849	No reduction

Table 3: File size scan and image data with Adaptive Image Resolution

4. Extended API functionality: Remote import of scan

This new API feature supports the project data import directly from the USB stick inside the instrument. There is no need to copy the data to local hard drive prior to processing. The feature is available for Windows and Linux versions of the API only.

5. API for Android and iOS

An application programming interface (API) for iOS and Android operating systems is now available for Leica Geosystems software partners. The APIs can be ordered via article numbers 890763 (iOS) or 890764 (Android) and provide direct access to the instrument for scan control as well as data import into third party software. Please contact your local Leica Geosystems sales representative for more details.

FIXED BUGS

Minor bugs have been fixed.

FIRMWARE INSTALLATION

- The new firmware v4.0 can be installed on any Leica RTC360 or RTC360 LT scanner, independent of any previous firmware version.
- Compatibility with Cyclone and Cyclone REGISTER 360
 - Cyclone v2021.1.0 or higher is required to import FW v4.0 data
 - Cyclone REGISTER 360 v2021.1.0 or higher is required to import FW v4.0 data