

# 3D REALITY. EFFORTLESS ACCURACY.

## LEICA BLK360 IMAGING SCANNER



### 360 IMAGERY

The BLK360's three 5 megapixel cameras unite to create a portion of a full dome image when a scan is entered. The BLK360 then rotates ~33° and the three cameras capture the next portion. The images are joined together to create a full dome, 360°HZ x 300°V image.

The first step of this scanning process takes about 30 seconds, and the operator can view as the images are acquired via Recap Mobile Professional or the Leica BLK360 controller app.



### CONTROLLER

The BLK360 can be entirely controlled using an iPad Pro 12.9" for ultimate flexibility. You will not have to struggle to read a small display or wonder how your imagery and point cloud looks until you get back home in the office.

When using the iPad Pro™ you can view as the image is being built on the first pass and then preview the completed image when it is complete. If you have a shadow or black spot in the scan, you'll know in real time right on the jobsite.



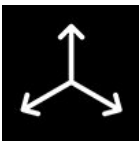
### MEMORY

The BLK360 arrives ready to use, even if you forget to charge your iPad Pro. In autonomous mode, the BLK360's 64GB of onboard memory will load up to 100 full reality-captures. Once connected to an iPad Pro, the storage limit is only the amount of memory on your tablet.



### WEIGHT/SIZE

The BLK360 is still under 1kg (2.2 lbs). At 100mm diameter (4") and 165mm high (6.5"), and easy to carry.



### 3D POINT CLOUD

A 3-D point cloud is just that: a cloud of points in 3D space that has additional information assigned to every point. Some typical attributes included with each point are intensity (a measure of reflection) or RGB (color) information.



### CONTROLS

Imagery, thermal panorama, HDR are all set to default settings by the app. The more experienced user can adjust some settings manually, such as scan resolution.



### PUSH BUTTON

The unit can be operated with its single button and on-board memory when scanning a simple space without a lot of blockages or setups.



# EFFORTLESS ACCURACY.

## LEICA BLK360 IMAGING SCANNER



### RECAP MEASUREMENT TOOLS

Measure anything in your scene capture data.



### WIFI HOTSPOT

The BLK360 acts as its own WiFi hotspot, so lack of WiFi on a jobsite is no issue. Its wireless LAN supports the 802.11 b/g/n standards.

Just to clarify - when using cloud based collaboration tools you will need to have internet access to send your scene data back to the office.

Upon entering a scan from an iPad Pro™ you can watch as your spherical image is built on the first pass, then preview the completed image. If you have a shadow or black spot in your scan, you'll be aware of this in real time at the scene.



### ACCURACY

Using three "polar" measurements, the scanner calculates 3D XYZ coordinates: a horizontal angle, a vertical angle as well as a slope distance from the scanner center to the measured point. Add a bit of trigonometry and you swiftly arrive to XYZ or Cartesian coordinates.

Put simply, the 3D accuracy of a laser scanner is affected by the preciseness of the polar measurements. The BLK360 has 3D point preciseness of 6mm @ 10m and approximately 8mm @20 m (1/4" at 33' and approx 1/3" at 66' respectively), 1 sigma. The BLK360 is a perfect as-built measurement tool with the collection of up to 360,000 measurements per second as well as full HDR imagery at the push of a button.

It's just like bringing the jobsite back to the office.



### INFRARED CAMERA

With the BLK360's built-in FLIR® Thermal Imaging Sensor, in the 30 seconds while the BLK360 is capturing its spherical HDR imaging, a 70°V x 360°HZ Thermal image panorama is simultaneously created. The IR sensor is precisely aligned to the HDR sensors and the laser scanner. As an extra bonus, the IR sensor not only supplies you a color scale, it is also calibrated within +/- 1°C. A perfect reality capture tool for energy audits.



### RANGE

Based on previous experience and knowledge, the BLK360 works in the range from 60 cm out to 60 meters (2' - 200') with the laser reflecting best off light colored surfaces.



# EFFORTLESS ACCURACY.

## LEICA BLK360 IMAGING SCANNER



### RECAP REAL-TIME REGISTRATION

Register laser scans and envision your reality scene data moments after scanning is complete. You can leave the job site self-assured you have all the scans you require.

Operate the scanner using the single button / on-board memory if scanning a simple scenario without a lot of blockages / set-ups.



### BATTERY

The BLK360 includes a removable / rechargeable li-ion battery that lasts for over 40 full scans (imagery, laser scan, thermal).



### LED INDICATOR

The BLK360 uses an LED ring to communicate its status.

Green = Ready

Blinking Green = Busy

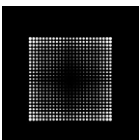
Yellow = Getting Ready.

Red = Not Ready.



### RECAP COLLABORATE

Share with project stakeholders to collaborate on your project



### SCAN RESOLUTION

Set your capture for more or fewer measurement points based on the requirements of the project. Envision the scan resolution as the grid you will measure on a wall 10 meters (33') away.

Resolution

Low = 1 measurement every 20mm (0.8") in HZ and V

Mid = 1 measurement every 10mm (0.4") in HZ and V

High = 1 measurement every 5mm (0.25") in HZ and V

High-res scans can capture between 50-80 million points in three minutes at 1GB+.

