



Leica BLK
Geosystems

LEICA BLK360

REALITY CAPTURE. NOW.



LEICA BLK360

IMAGING LASER SCANNER



GENERAL

Imaging scanner	3D scanner with integrated high-speed HDR spherical imaging system and Visual Inertial System (VIS) for real-time pre-registration
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DESIGN & PHYSICAL

Housing	Black anodized aluminium
Dimensions	Height: 155 mm Diameter: 80 mm
Weight	0.75 kg (0.85 kg incl. battery)
Transport cover	GVP739 transportation cover
Mounting mechanism	Button-press quick release

OPERATION

Standalone operation	One-button operation
Mobile devices	BLK Live app for iOS and Android smartphones Leica Cyclone FIELD 360 app for iOS and Android tablet computers and smartphones
Wireless communication	Integrated wireless LAN (802.11 b/g/n)
Internal memory	Storage for up to 1500 setups
Instrument orientation	Upright and upside down

POWER

Battery type	Internal, rechargeable Li-Ion battery (Leica GEB825)
Capacity	Up to 70 setups per battery

SCANNING

Distance measurement system	High speed time of flight enhanced by Waveform Digitizing (WFD) technology
Laser class	1 (in accordance with IEC 60825-1:2014)
Wavelength	830 nm
Field-of-view	360° (horizontal) / 270° (vertical)
Range*	Minimum 0.5 m - up to 45 m
Point measurement rate	Up to 680,000 pts/sec
Measurement modes	4 user selectable resolution settings (6/12/25/50 mm @ 10 m)

IMAGING

Camera system	13 Mpixel 4-camera system captures 104 Mpx raw data for calibrated 360° x 270° spherical image
Speed	< 8 sec. for full spherical LDR image in any light conditions < 20 sec. for full spherical 5-brackets HDR image in any light conditions
Image modes	<ul style="list-style-type: none">• Auto-exposed LDR• 5-brackets HDR• Off - scanning only

PERFORMANCE

Data acquisition	< 20 sec. for complete full dome scan and spherical LDR image at 50 mm @ 10 m resolution with automatic tilt measurements
3D point accuracy*	4 mm @ 10 m
Real-time pre-registration	Automatic point cloud alignment based on real-time tracking of scanner movement between setups based on Visual Inertial System (VIS) by video-enhanced inertial measurement unit

ENVIRONMENTAL

Robustness	Designed for indoor and outdoor use
Operating temperature	0° C to + 40° C
Dust/Humidity	Solid particle/liquid ingress protection IP54 (IEC 60529)

DATA PROCESSING

Data transfer	Wireless and USB 3.0
Desktop software	Leica Cyclone REGISTER 360 and Cyclone REGISTER 360 (BLK Edition)
Cloud software	HxDR Digital Reality: cloud-based digital reality platform

* At 78% albedo

All specifications are subject to change without notice.

All accuracy specifications are one sigma unless otherwise noted.

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