XGRIDS

Lixel K2

The Gold Standard in Lightweight Scanning

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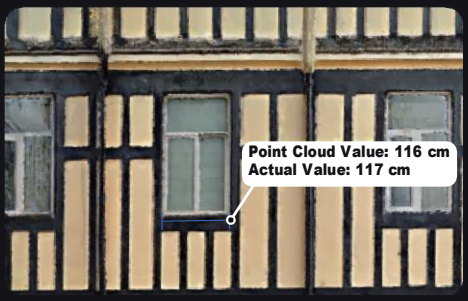
The Lixel K2 is XGRIDS' lightweight spatial scanner built for real-world conditions — balancing capture efficiency, ease of use, and deliverable quality. From engineering measurement, heritage preservation, to stockpile volumetrics, K2 is the reliable choice for 3D spatial data capture.

Data Fidelity
Consistent, engineering-grade data output

Scene Versatility
Built for multi-scenario projects

Ecosystem Reach
End-to-end workflow integration



Measurement Accuracy within 1 cm

Engineering-grade dimensions for walls, openings, and clearances.

Point Cloud as Thin as 1 cm

Clean structure and sharp boundaries for faster drafting.

Point Clouds, True to Life

Structural clarity and color fidelity, preserved.

Flexible Output for Diverse Project Needs

One capture, multiple deliverables to fit any project.

Applications

Real Estate Measurement

Engineering Measurement

Heritage Preservation

Stockpile Volume Measurement

Software Ecosystem

PC

LixelStudio

Upgraded for higher-quality data output.
Every detail refined, from true-to-life color to sharper point clouds.

PC

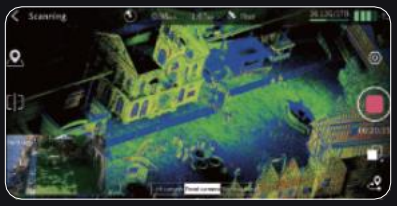
Lixel CyberColor

Proprietary open-source 3DGS technology.
Faster loading. Smoother navigation. Lighter sizes.

APP

LixelGO

Mobile workflow control.
Real-time capture preview.
Device status at a glance.



Specifications

Hardware

Power input	14.4V
Power consumption	<20W
Weight [1]	Approx. 1,200 g
Data interface	USB 3.1 Gen2
Internal storage	eMMC 512GB
RTK module	Supported (built-in)
WiFi	IEEE 802.11a/b/g/n/ac 2.4 GHz & 5 GHz
Bluetooth	v2.1+EDR / 3.0+HS / 4.2 / 5.0
Housing	Aviation-grade aluminum
Battery life	1.5 hours

Operating Environment

Temperature range	-20°C to 50°C
Ingress protection	IP54

Battery

Power method	Clip-on battery
Battery capacity	1,900 mAh

LiDAR Module

Laser class	Class 1 / 905 nm
Scan range	≥40m @10% reflectivity; 100m maximum range
Field of view	360° × -7° to +52°
Scan mode	Mobile
Point rate	200,000 pts/s

Vision Module

Camera count	3 (2× fisheye, 1× forward-facing)
Panoramic FoV	200° × 200°
Forward camera FoV	100° × 85°
Camera resolution	4000 × 3000
CMOS sensor size	1/2"
Shutter type	Rolling shutter

Accuracy

Absolute accuracy, elevation (RMSE) [2]	3 cm
Absolute accuracy, horizontal (RMSE) [2]	3 cm
Relative accuracy (RMSE) [3]	1 cm
Repeatability [4]	2 cm
Post-processed point cloud thickness	≤ 1 cm
Real-time absolute accuracy, elevation (RMSE) [5]	3 cm
Real-time absolute accuracy, horizontal (RMSE) [5]	3 cm

Key Features

Visual-aided positioning	Supported
Real-time colorized point cloud	Supported
Point cloud enhancement	Supported
3DGS	Supported via Lixel CyberColor

Output Formats

Point cloud	.las
Image	.jpg

Accessories

Phone mount	Included
Control point base	Included
Extension pole & adapter kit	Optional

Notes:

[1] Includes battery and base; excludes other accessories.
[2] Measured under open sky, no multipath interference, optimal GNSS geometry, and favorable atmospheric conditions.
[3] Point-to-point distance within 10 m; measured under laboratory conditions. Actual performance may vary.
[4] Measured under laboratory conditions. Actual performance may vary.
[5] Measured under open sky, no multipath interference, optimal GNSS geometry, and favorable atmospheric conditions. Supports WGS84 and CGCS2000 only.

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