

SKYLANDX

MetaCam Pro

Ultra light, Ultra Powerful



MetaCam Pro

Five integrated sensors and a LiDAR engine delivering up to 5.24M pts/sec. Powered by AI-driven SOTA-SLAM, MetaCam Pro delivers professional-grade results across complex indoor and outdoor environments, at walking or mobile speed. From surveying and engineering to inspection and asset management, from first scan to final deliverable.



High Precision & Accuracy



Stable Output at High Speed



Upgraded Camera System



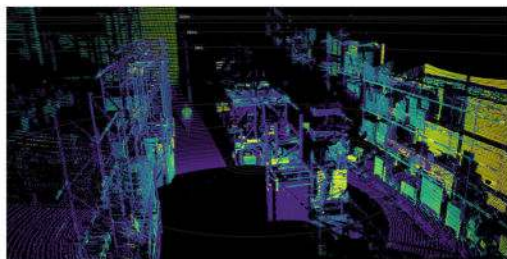
Smart Scan Resumption



Multi-Platform Deployment

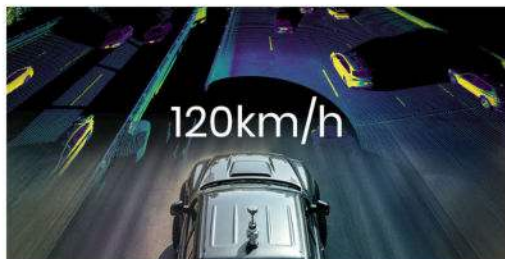


Instant Preview & Seamless Processing



Every Detail, Large-Scale Coverage

Up to 5.24M pts/sec and 200 m range. Capture full site detail across large-scale environments.



Robust & Reliable Data

Non-rotating LiDAR. Lower vibration, higher reliability, full capture at mobile speed. Combined with visual-LiDAR fusion SLAM for stable positioning throughout.



Colorized Point Clouds



3DGS



Rich Visual Data, Built Into Every Scan

Integrated panoramic and HD cameras capture rich visual data alongside every scan. One session, multiple deliverables.

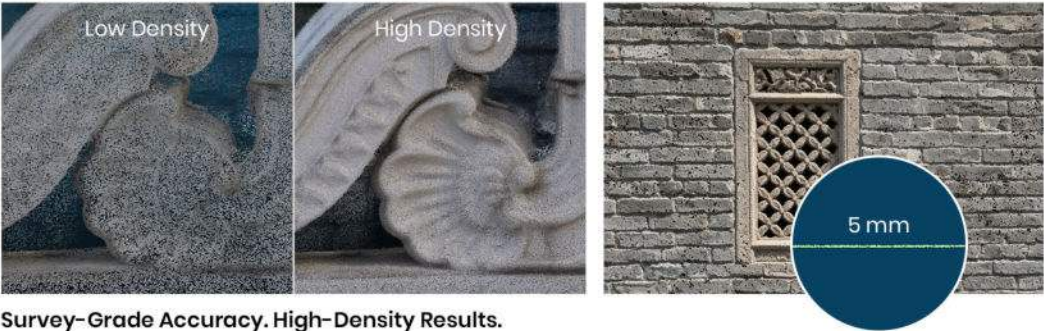


360° Panoramic Image



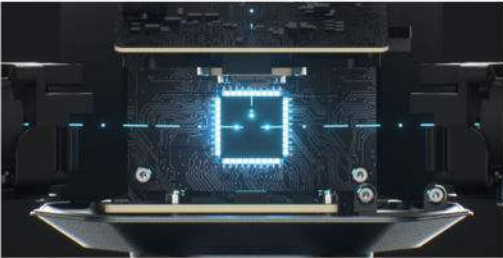
High-resolution Detail Photo

TECHNICAL HIGHLIGHTS



Survey-Grade Accuracy. High-Density Results.

AI-powered SOTA-SLAM achieves 5 mm relative accuracy and 3 cm absolute accuracy — precise and consistent. Combined with high point rates, every scan delivers dense, geometrically detailed point clouds.



TimeSync 3.0, True Microsecond Sync

Hardware-level microsecond alignment across all sensors, ensuring data consistency, reliable fusion, and cleaner raw data for third-party development.



RTK/PPK/GCPs Global Optimization

Supports RTK/PPK/GCPs fusion with SLAM to correct drift and anchor every scan to real-world coordinates, delivering geo-referenced results at any scale.

SOFTWARE

APP	PC	CLOUD PLATFORM
MetaCam Go Real-time preview and on-site scan verification.	MetaCam Studio Point cloud post-processing, optimization, and multi-format export.	MetaCam Cloud Cloud-based processing, 3DGS generation, and online collaboration.



General Parameters

Weight	1,160 g (w/o RTK); 1,325 g (w/ RTK)
Dimensions (Overall)	105 × 168 × 424 mm
Dimensions (Main Unit)	104.6 × 112.5 × 134.4 mm
Ingress Protection	IP5X
Operating Temperature	-20°C to +55°C
Storage Temperature	-20°C to +60°C
Data Storage	1TB build-in SSD
Wi-Fi	Wi-Fi 6, 2.4 GHz / 5 GHz dual-band, up to 20 m
Bluetooth	Supported
Data Export	USB 3.0 Type-C

Power

Operating Power	< 26 W
Battery Capacity	45.36 Wh (3150 mAh)
Battery Voltage	12.8 to 16.8 V
Operating Time	60 min
Charging Port	Type-C
Charging Power	PD 30 W
Charging Time	120 min

LiDAR

Number of LiDARs	1
Laser Class	Class 1 / 865 nm
Point Rate	2,620,000 pts/sec, up to 5,240,000 pts/sec
Scan Rate	20 Hz
Measurement Range	0.5 to 90 m @ 10% reflectivity 0.5 to 170m @ 80% reflectivity
FOV	360° (H), 42.4° (V) (-21.2° to +21.2°)

RTK

RTK Accuracy	0.8 cm + 1 ppm (H), 1.5 cm + 1 ppm (V)
Raw Observation Logging	Supported
Supported Constellations	BDS: B1I, B2I, B3I, B1C, B2a, B2b GPS: L1C/A, L1C, L2C, L2P(Y), L5 GLONASS: G1, G2, G3 Galileo: E1, E5a, E5b, E6 QZSS: L1C/A, L1C, L2C, L5 NavIC: L5 SBAS: L1C/A

Camera

Number of Cameras	4
Panoramic Camera	
Sensor Size	1/2"
Sensor Resolution	48 MP × 2 ⁽¹⁾
FOV	200° (H) × 200° (V)
HD Camera	
Sensor Size	1/2"
Sensor Resolution	48 MP ⁽¹⁾
FOV	67.2° (H) × 53.2° (V)
Aperture	F1.8
Focal Length	4.7 mm
V-SLAM Camera	
Sensor Resolution	1.3 MP
FOV	110° (H) × 80° (V)

Post-processed Accuracy

Point Cloud Thickness	5 mm ⁽²⁾
Relative Accuracy	5 mm ⁽²⁾
Absolute Accuracy	< 3 cm ⁽²⁾

Key Features

Real-time Colorized Point Cloud	Supported
Point Cloud Processing Mode	SOTA-SLAM (Support RTK, PPK, GCPs)
Mesh	Supported
3DGS	Supported
Smart Resume	Supported

Output Formats

Point Cloud	LAS / PCD / PLY / RCP / E57
3DGS	PLY
Mesh	OBJ
Image	JPEG

Software Ecosystem

MetaCam Go (Mobile)	iOS/Android
MetaCam Studio (Desktop)	Windows
MetaCam Cloud	Web-based

Compatible Accessories

MetaCam Hub / Backpack Kit / Support Vehicle-mounted

(1) Panoramic cameras and HD camera output at 12 MP by default; 48 MP available firmware configuration on request. Contact sales for details.
(2) Measured under laboratory conditions. Actual performance may vary.

APPLICATIONS

One Device. Every Environment.



Large-Scale Infrastructure



Industrial Facility & Digital Twin



Mining & Stockpile



Power & Utility



Urban Renewal



Dense Forestry

SKYLANDX

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