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SPACE CAMERA



Ultra-High-Precision Native RGB-D Spatial Camera Built for Physical AI

Space Camera is a native RGB-D spatial camera built for Physical AI. Powered by RoboSense's proprietary Peacock SPAD-SoC and a fully solid-state architecture, it is ultra-compact and robustness, delivers pixel-level RGB-D alignment, synchronized IMU data, and millimeter-level depth precision for reconstruction, tracking, training, and localization.

By natively outputting measurable, reusable multimodal data, Space Camera helps algorithms such as 3DGS, 4DGS, motion capture, RGB-D SLAM and obstacle avoidance, reduces dependence on complex data acquisition and post-processing registration, accelerates the deployment of Physical AI across more scenarios.

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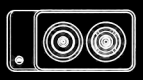
Advantages



Pixel-Level RGB-D Alignment



Millimeter-Level Depth Precision*



Fully Solid-State Architecture



High-Frame Rate Capture



Wide FOV & Long Range



Flexible Outputs for Workflows

Specifications

dToF	Point Rates @ 30 Hz	2,300,000 pts/s
	Depth Precision*	5 mm (1σ)
	Frame Rate	Up to 60 Hz
	FOV (H×V)	120°×90°
	Range	Up to 50 m
RGB	Resolution	Up to 12 MP
	Frame Rate	Up to 60 Hz
	FOV (H×V)	120°×90°
	HDR	Supported
IMU	Motion Data	Integrated IMU
System	Power Consumption	≤ 5W typical
	Dimensions (L×W×H)	75.9 mm×44.9 mm×36.1 mm
	Weight	160 g
	Interface	GMSL2 POC / USB 3.0
	Operating Temperature	-20°C to 60°C
	Storage Temperature	-20 °C to 60 °C
	Ingress Protection	IP65
	Laser Safety	IEC 60825-1 Class 1

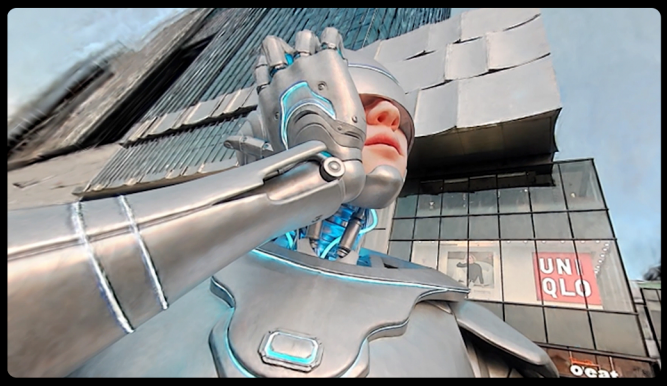
*1σ, Based on empirical values from general-scenario testing, ranging accuracy may vary with distance and target reflectivity.

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High-Quality Multimodal Data

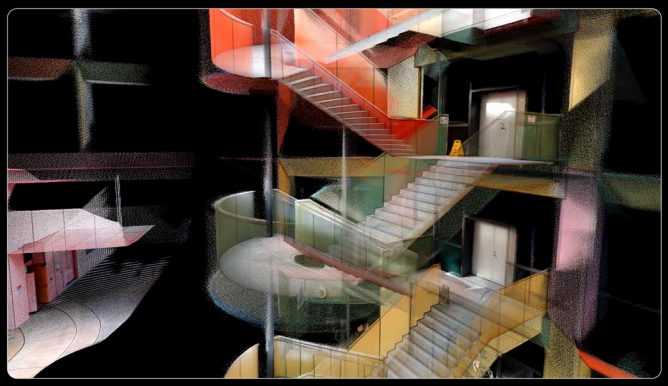
3DGS



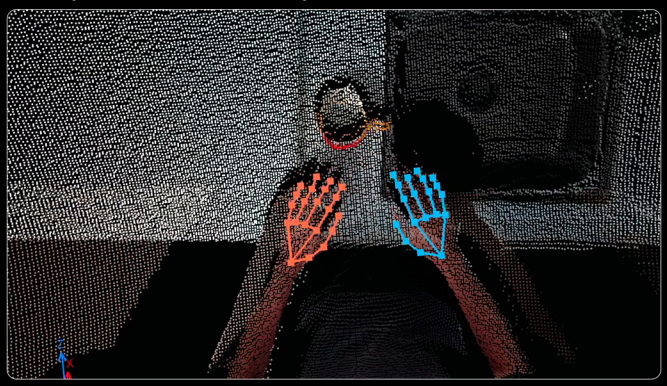


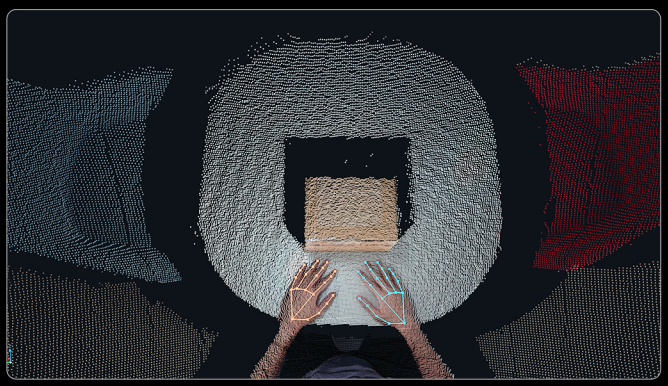
RGB-D SLAM



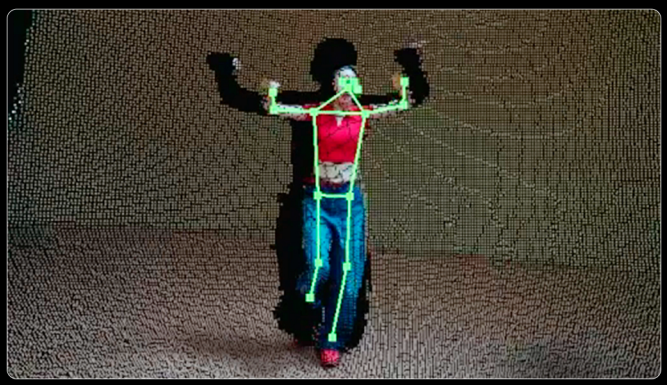


Manipulation Data Capture





Motion Capture



RGB-D Point Clouds



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