

PHOTONEO MOTIONCAM-3D COLOUR BLUE

3S-MCS0-00BC3
MotionCam-3D Color S



- Blue Scanning Laser
- Works well with reflective surfaces
- Optimal data for AI processing
- Scanning range from 36 cm to 3.7 m
- Works for objects moving up to 40 m/s

PRODUCT DESCRIPTION

The MotionCam-3D Blue represents the next generation of high-performance 3D vision sensors, employing Photoneo's patented Parallel Structured Light technology to capture high-resolution, sub-millimetre-accurate 3D data in real time. It delivers precision up to 0.3 mm accuracy with 0.1 mm temporal noise, scanning speeds as fast as 20 frames per second, and exposure times around 10ms. The device operates over a versatile working range, from approximately 366 mm to 558 mm on the "S" variant, with larger "S+", "M", "M+", "L" and "L+" models offering extended reach up to nearly 3.8 m. Its point-to-point distance sits around 0.37 mm, with the scanning area expanding to around 507 × 343 mm. Housed in an IP65-rated enclosure and powered via PoE and 24 V, the unit weighs approximately 1 kg and measures roughly 308 mm × 68 mm × 85 mm. A built-in NVIDIA Jetson TX2 GPU enables on-device processing and seamless integration into industrial machine-vision systems.

The robust design and advanced imaging capabilities of the MotionCam-3D Colour Blue give it exceptional adaptability across sectors such as logistics, automotive, manufacturing, and robotics. It excels in tasks like high-speed bin-picking, conveyor belt monitoring, in-motion inspection, robot hand-eye coordination, and digital-twin creation, even when dealing with transparent, reflective or hot (≥ 1200 °C) surfaces or under direct sunlight. The augmented blue laser and improved components deliver up to a 50 % boost in scanning performance and a 25 % enhancement in reconstructing challenging materials, making approximately 97 % of automotive and logistics items pickable without pre-sorting. With GigE Vision 2.1 compliance and one-click autonomous maintenance, integration is straightforward while downtime is minimised. This makes the device ideal for high-throughput, time-critical automation, enabling faster cycle times, richer RGB-colour 3D data for AI-based inspection, and reliable 3D capture of dynamic scenes.

TECHNICAL DATA

Calibration accuracy (1 σ)	0.3 mm
DC input	PoE & 24V
Depth	85 mm
GPU	Nvidia Jetson TX2
Height	68 mm
IP class	IP65
Point to point distance	0,37 mm
Scanning area at maximum spot	507 x 343 mm
Scanning range max	558 mm
Scanning range min	366 mm
Scanning time	10ms
Temporal noise (1 σ)	0.1 mm
Weight	1000 g

Width	308 mm
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