



AM-CELL C Series Automated Optical 3D Inspection System

AM-Cell C

Pro-Level Inspection. Simple. Reliable.

TYPE	AM-CELL C13X		AM-CELL C18X	
Space Size	4.0 m × 3.0 m		5.0 m × 4.0 m	
Robot Type	Cobot, Reaching 1300 mm		Cobot, Reaching 1800 mm	
3D Scanner Supported	Full series of SCANOLGY's Optical 3D Measurement System			
Communication Protocol	TCP/IP, USB 3.0, OPC UA		TCP/IP, USB 3.0, OPC UA	
Expanded Communication	Socket, Modbus-TCP		Socket, Modbus-TCP	
Safety Mode	Active Emergency Stop + Safety with Force Feedback			
Input Voltage	AC ~ 220 V / 50-60 Hz		AC ~ 220 V / 50-60 Hz	
Equipment Power	1.5 kW		3.0 kW	
Turntable Type	TT200	TT500	TT800	TT1100
Payload	200 kg	500 kg	800 kg	1000 kg
Maximum Object Size	∅ ≤ 1200 mmH ≤ 1000 mm	∅ ≤ 1500 mmH ≤ 1200 mm	∅ ≤ 1800 mmH ≤ 1500 mm	∅ ≤ 2200 mmH ≤ 1800 mm
Turntable Power	0.75 kW	1.0 kW	1.5 kW	2.0 kW
Motor Type	Absolute Servo Motor			



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The AM-CELL C Series is an automated optical 3D inspection system combining a 3D scanner, robot, 3D digitization software, and central control platform, designed for complex parts and medium-to-large structural components. It automates the entire workflow—from path planning and measurement to analysis—freeing you from complex tasks.

Its modular units enable flexible layouts and multi-positioner operations. Supporting loads from 200–1000 kg and various fixtures, it effortlessly handles metal sheets, die-cast parts, welded assemblies, battery packs, and more.

Powered by DefinSight 3D software, it delivers smart path planning, high-precision measurement, and automated reporting with direct MES/QMS integration. Together, these features let manufacturers build fast, precise, and interconnected inspection systems that improve efficiency and reduce costs.



Flexible Layouts

L-shaped, T-shaped, and more.



For Different Uses

Various measurement fixtures and turntables.



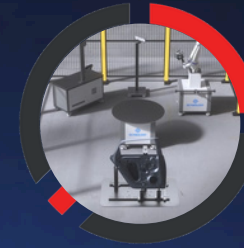
DefinSight Software

3D digitization platform with intelligent simulation and validation.



Non-Contact Optical Measurement

Accuracy up to 0.020 mm, scanning speed up to 6.63 million measurements/s.



For Various Parts

Ideal for stamped, machined, and structural components.



Versatile Deployment

In-line, near-line, off-line, or laboratory environments.



Mobile Control Panel

Touchscreen and buttons. Real-time visual, audible, and light feedback.

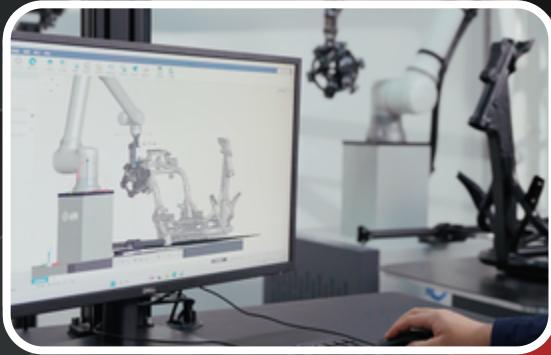


Smart Error Prevention

Real-time monitoring and alerts for safe and reliable operation.

Pro-Level Automated Measurement

With the DefiniSight all-in-one 3D digitization software and parallel processing, the AM-CELL C automates the entire inspection loop: path planning, measuring, and analyzing.

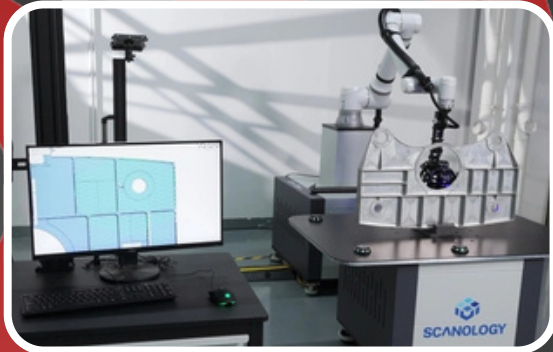


Simulation & Validation

Digital Measurement Room (DMR) enables virtual path planning and collision simulation—no programming skills needed.

Fully Automated Operation

Non-contact optical measurement automatically recognizes holes, slots, and edges. From part identification to scanning and report generation, the entire process runs automatically.



Smart Error-Proofing

Vision-based verification ensures correct part type, placement, and clamping, preventing mis-scans or misoperations.

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Engineered for Any Environment

Thanks to its high-precision sensors and automatic calibration, AM-CELL C delivers consistent measurements even under harsh shop-floor conditions.

High-Precision Optical Measurement

Next-generation optical 3D scanners achieve up to 0.020 mm accuracy at 6.63 million measurements/s.

accuracy at

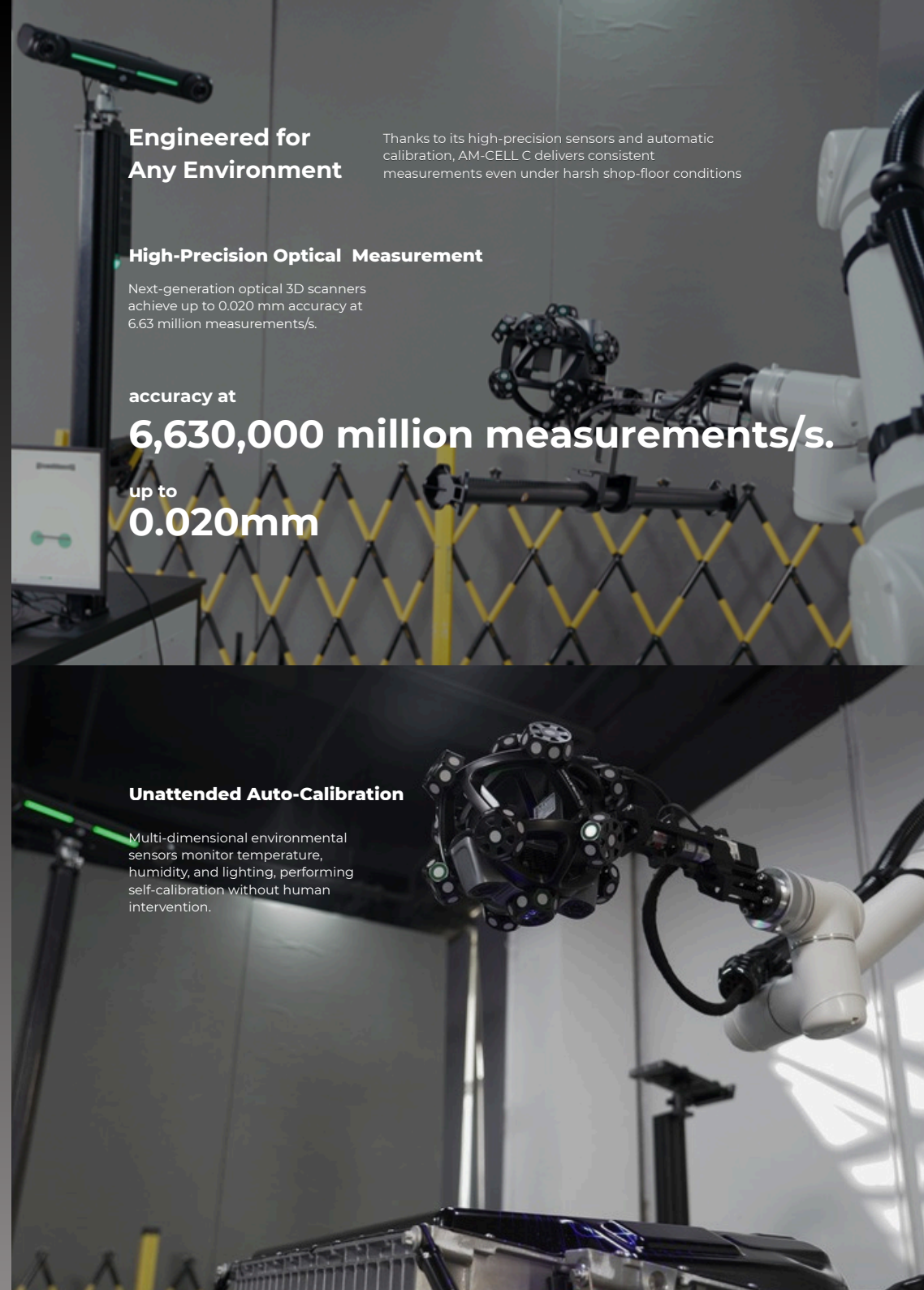
6,630,000 million measurements/s.

up to

0.020mm

Unattended Auto-Calibration

Multi-dimensional environmental sensors monitor temperature, humidity, and lighting, performing self-calibration without human intervention.



Smart Data for Efficient Monitoring

With the DefInSight all-in-one 3D digitization software and parallel processing, the AM-CELL C automates the entire inspection loop: path planning, measuring, and analyzing.



Accurate Analysis

Compare measurement results with CAD model in one click to extract critical features, and gain insight into intuitive GD&T deviations.



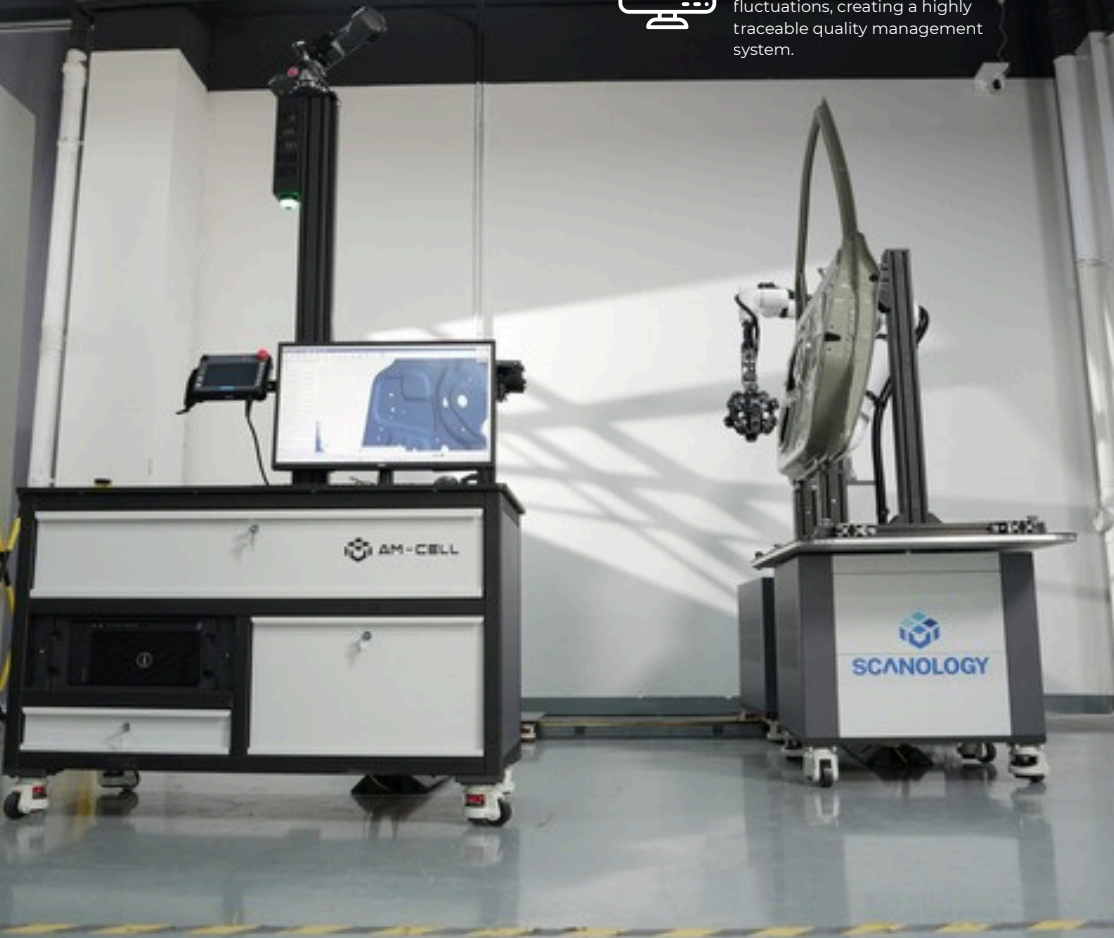
Data in Sync

Import inspection results directly to MES, PLC, or QMS systems for real-time updates.



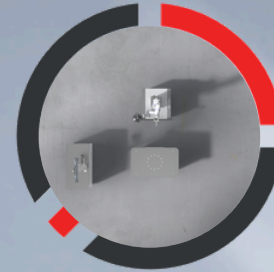
Process Monitoring

Integrated SPC and trend analysis modules track production fluctuations, creating a highly traceable quality management system.



Not Just a Turnkey Solution

With modular units and standardized workflows, AM-CELL C breaks the limits of fixed layouts, offering flexible deployment and expansion.



Smart Modular Design

Standard modules, flexible layouts, and multi-positioner setups—one system for sheet metal, die casting, welding, and battery pack inspections.



Scalable by Design

From a single station to full line integration, stations can be easily replicated, workflows reused, and parameters inherited—enabling a scalable automated measurement system.