

# NexBot Robotics

## 332-001 Laser Safety Scanner 5.5m Protective Field

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SKU: NXB-GEN-332-001 | Category: Sensors & Vision > Proximity & Safety Sensors > Laser Safety Scanners

### Overview

The NexBot Robotics 332-001 Laser Safety Scanner provides robust, non-contact monitoring of hazardous areas in automated industrial environments. This Type 3 safety device is engineered to protect personnel from dangers associated with moving machinery by creating user-defined protective fields. It is a critical component for building compliant and productive robotic systems, from high-speed articulated arms to collaborative applications. Featuring a substantial 5.5-meter protective field range and an expansive 275° scanning angle, the 332-001 scanner offers comprehensive coverage for large work areas with a minimal blind spot, often reducing the need for multiple units. Its design achieves Performance Level d (PL d) in accordance with EN ISO 13849-1, ensuring reliable operation in safety-critical functions. The scanner's high angular resolution allows for precise object detection, and users can configure multiple field sets, including two protective fields and up to eight warning fields, to dynamically adapt to changing operational requirements. This flexibility is ideal for applications like machine tending, where access needs vary depending on the robot's state. Key applications for the 332-001 scanner include horizontal area guarding for robot cell entry, vertical access protection, and collision avoidance for automated guided vehicles (AGVs). In collaborative robot settings, it can be used to monitor the workspace and trigger a speed reduction or complete stop when personnel enter a designated zone. The scanner's selectable object resolution (30 mm, 50 mm, 70 mm) allows it to be tailored for detecting anything from a hand to a full person, preventing unintended shutdowns while maintaining safety. Installation is streamlined through a compact, rugged die-cast aluminum housing and standard M12 connectors. Configuration is managed via intuitive software, allowing for easy setup of complex field shapes to fit precisely around machinery. Onboard diagnostic LEDs provide immediate visual feedback on the scanner's operational status, simplifying troubleshooting and maintenance. The integrated OSSD (Output Signal Switching Device) outputs connect directly to a robot's safety control system, providing a dependable stop signal when the protective field is breached.

# Technical Specifications

Parameter	Value	Unit
Weight	1.1	kg
Material	Die-cast Aluminum	
Voltage	24VDC	
IP Rating	IP65	
Country of Origin	KR	
Protocol	EtherNet/IP	
Dimensions	105 x 102 x 152 mm	

**Safety Notice:** This product must be installed and operated by qualified personnel in accordance with applicable safety standards (ISO 10218, IEC 61508).