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RFID Semi-Auto Single Box Tunnel Machine Product Specification

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1. Product introduction

ROV-R120 is an industrial-grade semi-auto RFID acquisition tunnel, which is independently designed and developed by our company. It takes Radio Frequency Identification Technology as the core and combines mechanical design, multiple sensors, electromagnetic shielding, automated control and other technologies. It completely solves the problems such as tag miss-reading or reading the wrong tag in the supply chain, meeting the requirement of high efficiency and accuracy of product circulation. What's more, the tunnel combines the warehouse management system to completely overcome the shortcomings of barcode management, truly realizing the SKU automated management. And it also saves labor costs and greatly improves work efficiency.

Industry Application: The tunnel is mainly used for SKU identification, such as warehouse management of fashion, cleaning, alcohol, electric power industry, comparison of SKU tag and box label, product inventory, etc.

2. Pictures



3. Product Features

- High identification efficiency: It only costs 3-5 seconds to read 200+pcs of tags.
- Professional motion control and mechanical design fully solves the problem of tag miss-reading;



- Compact electromagnetic shielding and radio frequency optimization can eliminate the harm of RF radiation to the human body, and the tag reading accuracy reaches 100% (Depends on the reading environment and performance of tags);
- Imported or domestic RFID readers can be chosen to meet the needs of different users. And we support customers to develop secondary software.

4. Specification Parameters

Main Performance Index	
Air Interface Protocol	EPC Global Class1 Gen2/ISO 18000-6C
RFID Frequency	902.75MHz ~ 927.25MHz, Channel Spacing is 500kHz
RFID Frequency Mode	Fixed Frequency / Frequency Hopping, 10 Frequency
	Hopping Points
Reader	Domestic (Imported E710 chip)
Reader Output Power	1-30±1dBm
Conveyor Speed	Up to 40m / min
Conveyor Load Bearing	Up to 50KG
Efficiency	Manual
Automatic Conveyor Belt	One Conveyor / Independent Power Control
Material of Conveyor Belt	Industrial Chain Plate Belt
Screen Door	Shutter Door (Electric)
Number of Tag Reading	200+pcs
Reading Efficiency	3~5 Seconds
Reading Mode	Motionless
Operating Mode	Interval T Cycle / Continuous Work / External Trigger
Screen	15.6-inch Resistive Touch Screen, 1920*1080
Industrial Computer	J6412/8GB+128GB
Photoelectric Switch	2 Groups/Imported
Electronic Control	With Domestic PLC
Antenna	4 Groups of8dbi Antennas
Load Capacity	50kg



Adjustable Speed of Conveyor	0-40m/min	
Reversible or Not	Reversible Conveyor	
Opening Speed	2.5 Second	
Dock With Production Line or Not	No	
Physical Environment		
Model Code	ROV-R120	
Tunnel size (mm)	1000 (width) ×1773(depth) ×1729 (height)	
Ball Transfer Table Size (mm)	900 (width) ×650 (depth) ×600 (height)	
Inner Size(mm)	800 (width) ×1000(depth) ×800(height)	
Maximum Passable Size of Box (mm)	700 (width) ×900(depth) ×700 (height)	
Total Weight	About 240KG	
Operating Temperature	-20°C- 60°C	
Storage Temperature	-10°C~60°C	
Operating Humidity	20-95% (non-condensing)	
Work Voltage	220VAC (±10%) 50±3HZ	
Power	350W	
Enclosure Material	Spray-paint Carbon Steel	
Shielding Performance	5~10CM	