Rovinj
罗维尼科技
Rovinj Technology

Dedication, Integrity, Innovation, Win-win
IOT Application Expert

Products

RFID Standard Single-Box Tunnel Machine Product Specification

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1. Product Introduction

The ROV-SC201 series is an industrial-grade 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, leather goods and luggage, alcohol, electric power, the comparison of SKU tag and box label, product inventory, etc.

2. Picture

3. Product Features

■ High identification efficiency: It can read 600+pcs of tags at a time within 3 seconds;

■ 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);

- The industrial computer software can control the function of the whole machine and monitor the running status. There are also external mechanical buttons, which are convenient for the operators to control the working status of the equipment at any time;

- The design of industrial-grade plastic chain plate belt conveyor fully solves the belt offset maintenance problem;

- There is maintenance door on both sides, which facilitates the equipment maintenance;

- Optional sorting module for abnormal boxes/goods/items meets the needs of different users. And we support customers to develop secondary software.

4. **Specification**

Main Specifications	
Air Interface Protocol	EPC Global Class1 Gen2/ISO 18000-6C
RFID Frequency	902MHz~928MHz
RFID Frequency Mode	Fixed Frequency / Frequency Hopping, 10 Frequency Hopping Points
Reader Output Power	5-32.5±0.5dBm
Conveyor Speed	Up to 40m/min
Conveyor Load Bearing	Up to 80KG
Efficiency	8~10boxes/min
Number of Tag Reading	600+pcs
Reader	Imported (Impinj-R420)
Reading Efficiency	Within 3 seconds
Reading Mode	Motion/Motionless
Operating Mode	Interval T cycle / Continuous operation / External trigger
Screen	18.5-inch Resistive Touch (Embedded)
Industrial Computer	I5/4GB
Automatic Conveyor Belt	Three Conveyors/ Independent Power Control
Material of Conveyor Belt	Industrial Chain Plate Belt
Programmable Controller	Imported

Electronic Control System	Original PLC
Antenna	4 Groups of 9dbi Antennas
Photoelectric Switch	8 Groups/Imported
Load Capacity	80kg
Adjustable Speed of Conveyor	0—40m/min
Reversible or not	Reversible Conveyor
Opening Speed	1 second
Dock With Production Line or Not	Yes
Physical Environment	
Model Code	ROV-SC201
Total Size (mm)	1120 (width) × 4100 (depth) × 1900 (height)（The width of the lifting arm is not calculated）
Inner size(mm)	800 (width) × 1600 (depth) × 880 (height)
Front/Rear Conveyor Size (mm)	960 (width) × 1200 (depth) × 580 (height)
Maximum Passable Size of Box (mm)	790 (width) × 1100 (depth) × 800 (height)
Weighing Module	Optional
Sorting Module	Optional
Total Weight	About 700KG
Operating Temperature	-20℃ – 60℃
Storage Temperature	-10℃~60℃
Operating Humidity	20 – 95% (non-condensing)
Work Voltage	220VAC（±10%）50±3HZ
Power	1000W
Enclosure Material	Spray-paint Carbon Steel
Shielding Performance	5-10CM