FSC-RD01LI UHF RFID Integrated Reader

Introduction

FSC-RD01LI is a UHF RFID reader with integrated 9dBic antenna. It is full compatible with ISO18000-6C protocol. The working frequency band covers CHN 920MHz～925MHz, FCC 902MHz ~ 928MHz and ETSI 865MHz ~ 868MHz. For the output power 0dBm ~ 33dBm is optional. It has the advantages of high portability, long recognition distance, fast reading speed, high accuracy, strong anti-interference ability, excellent protection performance and easy to installation.

Compared with the traditional fixed reader, this reader device has obvious advantages in terms of convenience and integration efficiency, so that customers do not need to consider the coordination of the reader and the antenna. It can be widely used in many fields such as warehouse management, personnel management, asset management, commercial retail and automatic vehicle identification.

Features

- Impinj E710 inside
- Built-in embedded operating system, customizable and scalable, convenient for customized development
- supports multiple communication interfaces such as RJ-45/RS-232/RS-485
- Built-in 9dBi circular polarized antenna
- Industrial, easy-to-install I/O port connectors

- Special application project custom interface / data transmission can be extended

Applications

- Intelligent Vehicle Management such as vehicle access control management, parking lots, and automatic vehicle weighing industry.
- Production automation, visualization management.
- Logistics industry such as container management, pallet management.
- Electronic tickets and personnel access control.
- Asset access management.

Main Technical Performance Indicators

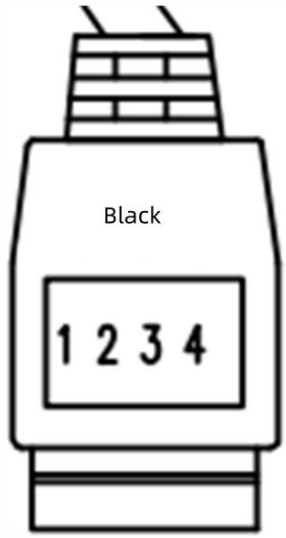
Model	FSC-RD01LI
Hardware, OS and Firmware Management	
Processor	ARM Cortex-M3 108MHz
Storage	Flash 128KB
Firmware upgrade	Demo software/Remote upgrade
SDK	Windows platform– .Net / .Net core / C++ / Java SDK
Physical Parameters	
Sizes	258mm(L)*258mm(W)*36mm(H)
Weights	1.2KG
Housing material	Aluminum+ABS
RFID	
Chip	Impinj Indy E710
Air protocol	ISO/IEC 18000-6B, 6C/EPC C1Gen2
Frequency	CHN: 920MHz～925MHz, 840MHz～845MHz
	FCC: 902MHz～928MHz
	ETSI: 865MHz～868MHz
Built-in antenna	Circular polarization 9dBi, VSWR≤1.3：1
Output power	33dBm±1 dBm
Channel bandwidth	＜200KHz
Frequency stability	≤±10ppm
Reading range	0m～30m (related to factors such as transmit power, antenna type, tag type and application environment)
Write distance	0m ～ 15m (related to factors such as transmit power, antenna type, tag type and application environment)
Label recognition speed	＞800times/second
Features	Support RSSI/support multiple tags/intensive reading and writing/online upgrade/tag data filtering
Operating mode	Fixed frequency/frequency hopping selectable
Connection	

Communication interface	RJ45, RS-232, RS-485, Wiegand 26/34/66
I/O interface	1 input, 1 12V, 2 5V output
Power supply	DC 12V/3.33A
Environmental Parameters	
Operating temperature	-20℃～+70℃
Storage temperature	-40℃～+85℃
Operating humidity	5%RH～95%RH (non-condensing)
Protection class	IP65

Interface Signal Definition

1. Black 4pin terminal

Terminal No.	Signal Name	Signal Definition
1	IN	External Input（5-24V）
2	B	RS-485 Negative
3	A	RS-485 Positive
4	GND	Ground



2. Red 4pin terminal

Terminal No.	Signal Name	Signal Definition
1	D1	Wiegand 1
2	D0	Wiegand 0
3	OUT	Output（12V）
4	GND	Ground

Dimensions