# PRO12RF



## Introduction

PRO12RF UHF RFID reader base on new generation reader technology platform development, combine UHF RFID advanced technology and many years reader application base experience. This reader is more stable and can use in various applications.



### **Protocol**

<ISO/IEC18000-6 TYPE B>

<ISO18000 Part 6 Parameters for air interface communications at 860MHz to 960MHz> <EPC RFID Protocols Class-1 Generation-2 UHF RFID Protocol for communications at 860MHz to 960MHz> <800/900MHz RFID Technology application implementation regulations>

## **Parameter**

Item:	Parameter	
Frequency:	US(902 $\sim$ 928MHz), China(920 $\sim$ 925MHz), EU(865 $\sim$ 867MHz), other frequency selectable	
Protocol:	ISO18000-6B/6C,EPC G2	
RF Power:	0~31dBm adjustable	
Sensitivity:	-80dBm(12dBi antenna more than 12 m)	
Read Speed:	Multi tag-200pcs/second, single tag 2000 times/minute	
Processor:	ARM CORTEX M3 100M CPU	
Memory:	16KB tag data memory and 32KB ferroelectric memory	
Data Interface:	100M Ethernet interface	
	RS232/RS485 interface wiegand 26/34	
	One team input and one team output (TTL), one team Relay	
Power Supply:	DC+9V~+15V	
Working Temp:	-20~60°C	

## PRO12RF

## **UHF Long Range Integrated Reader**

## **Functional Description**

#### • EPC G2 Tag Operation Function

Reader support EPC G2 tag: Multi-tag query, read, write, selection. Single tag read, write, lock, kill.

#### • ISO18000-6B Tag Operation Function

Reader support ISO18000-6B tag: Multi tag query. Single tag read, write, lock and lock query.

#### • Working Parameter Setting

User can set the parameter of interface, IP address, jump frequency point, output power, reading indication, working mode etc. When in Timing or Trigger mode, can set the parameter of read card type, read area, address, length, output method, output interface.

#### • Communication Function

Support Ethernet, RS232 and RS485 both-way communication interface, protocol compliant to 'UHF RFID reader and PC communication protocol V2.0'; Also reader support Wiegand single way data transmission interface, format compliant to Wiegand 26 and Wiegand 34 interface protocol.

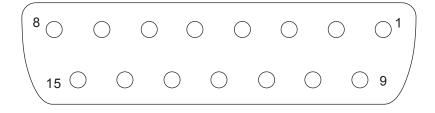
#### • Off-line Working Mode

Support Timing read or Trigger read working mode, all tags in query area can be read according to set address and length, read data direct output or buffer. Read data can selected for filtering same tag. Output data interface can be any one of interface or multiple interface. Meanwhile can configure Relay. Data buffer have power-off function preserves.

#### Maintain and Update Functions

Support web network server function, can set working parameter on Web page, reader also support serial port and RJ45 port upgrade in the application firmware.

## **Interface Definition**



**DB15** Pin Diagram

# **PRO12RF** UHF Long Range Integrated Reader

#### **DB15 Pin Function Allocation**

Pin Number	Pin Function
1	GPIO signal output2
2	GPIO signal output1
3	Signal ground
4	RX(RS232)
5	TX(RS232)
6	Signal ground
7	GPIO signal input 2(closed)
8	GPIO signal input 1
9	Signal ground
10	A+ (RS485)
11	B- (RS485)
12	Signal ground
13	Relay normal close port
14	Relay common port
15	Relay normal open port

## **Appearance Structure Size Chart**

