

UHF RFID Integrated Card Reader and Writer

0702/0703/0704 Manual

Introduction

UHF RFID reader has many advantages of more protocol supporting, fast reading, more labels identification, circular polarization antenna and compact design. This reader is widely used in all kinds of RFID system.

Application:

- ☆ Logistics and Warehouse management;
- ☆ Parking control system;
- ☆ Manufacturing management;
- ☆ Products anti-counterfeiting detection;
- ☆ Other field: club management, library, student

schoolrolls, attendance management and swimming pool system etc.

Specification

- 1) Working Frequency: 860~960MHz;
- 2) Support Protocol: ISO18000-6B,EPC GEN2;
- 3) Frequency Hopping: FHSS or fixed frequency set by software;
- 4) Working Way: automatically reading card at regular time, can set reading card way;
- 5) Frequency Power: 0~30dBm, be adjusted by software;
- 6) Reading Distance: 1~5m / 1~15m / 1~25m;
- 7) Reading Sensitivity: dual polarization reading;
- 8) Reading Speed: one label 64 bit ID number < 6ms;
- 9) Antenna: build-in circular polarization antenna, gain 8dB /build-in linear polarization antenna, gain 12dBi /build-in linear polarization antenna, gain 12dBi;
- 10) Interface:RS485,RS232,Wiegand26,Wiegand34,RJ45;
- 11) Working Voltage:DC+12V;
- 12) Working Status Indication: buzzer;
- 13) Power: <4W;
- 14) Working Temperature: -20℃~+80℃;
- 15) Storage Temperature: -40℃~+125℃;

- 16) Working Humidity:20% ~ 95%(no condensing);
- 17) Dimension:227×227× 60mm / 450×450× 75mm / 450×450× 75mm;

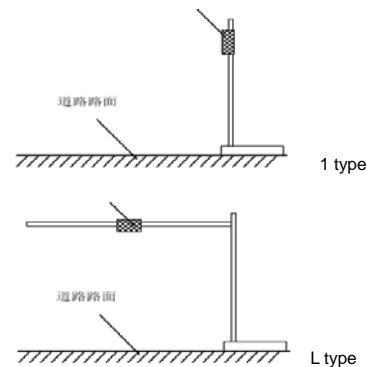
Signal Definition

Serial No.	Name	Color	Function
1	DC+12V	Red	positive
2	GND	black	Negative
3	TXD(PIN2)	brown	signal output
4	RXD(PIN3)	Yellow	signal input
5	GND(PIN5)	Blue	grounding
6	Trigger	Gray	Trigger pin
7	DATA0	Green	D0
8	DATA1	white	D1
9	485+	Purple	485+
10	485-	orange	485-

Installation and Application

1) Installation

There are two ways to install the reader bracket: “1 type” and “L type”, see pictures below: select the installation way according to application and actual system. Generally, “1 type” reading distance is not long, but simple installation; “L type” reading distance is longer, but complicated installation.



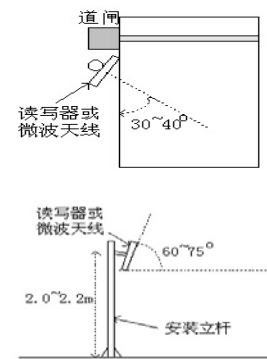
2) Reader Fixing and Height Adjustment

“1 type”, the diameter of bracket pole must be 50-60mm, the length is 2.2 meter, and it would be better use the stainless steel material which thickness is more than 1.2mm. Fix the

reader at the top of bracket by accessories. Adjust the height of reader according to car type (big car or small car), usually the height is about 2.0m (1.8-2.2 meter).

“L type”, the diameter of L type bracket vertical pole must be 60-80mm, the diameter of horizontal pole must be 50-60mm, and it would be better use the stainless steel material which thickness is more than 1.2-2.0mm. Fix the reader at the top of bracket and close to the center of roadway. Adjust the horizontal pole height according to car height; usually the height is about 3.5-4.0meter.

3) Reader Angle Adjustment

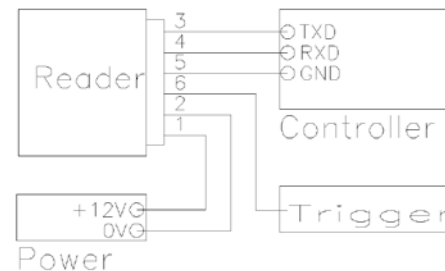


Antenna angle 1: When antenna incline ground, the angle between antenna and horizontal line, is about 60~75°

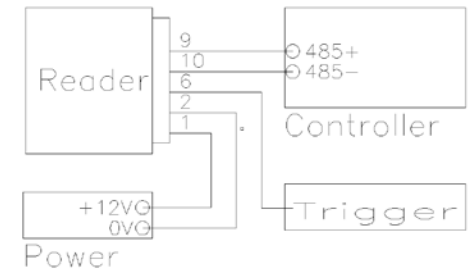
Antenna angle 2: When antenna incline roadway, the angle is about 30~40°

Communication

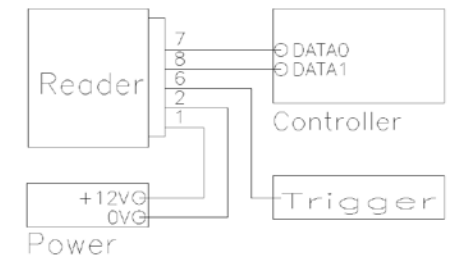
1) RS-232



2) RS-485



3) Wiegand



Attention and After Service

- 1) When card reader working, the installation people should stand 30cm away from the antenna, this is the most approaching distance of America FCC standard.
- 2) Stand far away from reader when it working.
- 3) Wiegand communication, power trigger level should be same as Wiegand trigger level.
- 4) Trigger conditions: high level or low level.
- 5) According to production date, we provide 1 year guarantee, but collision, high voltage, wrong operation and man-made damage are not in free repairing field.