

# **UHF RFID Crystal Gate**





Model: RRU-CH-C16058

Size: 1530 x 640/580 x 48/20 mm

Weight (1 panel): 28Kg

Color(two for choice): Transparent, White, Light Gray

**Housing: Acrylic & Metallic Base Box** 



# GENERAL DESCRIPTION

RRU-CH-C16058 is a high performance EPC C1G2(18000-6C) protocol UHF tag gate device. Designed upon fully self-intellectual property, it supports fast tag anti-collision operation with high identification rate and 2 line infrared sensors for motion detection. It can be directly connected to host, controller and other equipments. It can be widely applied in many RFID application systems such as logistics, open conference attendance system, open access control and industrial production process control.

## **FEATURES**

- Self-intellectual property;
- 840~960MHz frequency band (frequency customization optional);
- Support ISO18000-6C (EPC C1G2) protocol tag;
- FHSS or Fix Frequency transmission
- RF output power up to 30dbm (adjustable);
- Built-in 2 line infrared motion sensor with intelligent movement direction determination and personnel counting display\*;
- Support Inventory and EAS mode;
- EAS mode supports true EAS or EPC emulated EAS;
- Advanced anti-collision algorithm, high identification rate and optional RSSI;
- Low power dissipation design with excellent safety and reliability;
- Support buzzer and alarm;
- Support RS232 and TCP/IP interface;
- Provide DLL and Demonstration Software Source code to facilitate further development.

#### **CHARACTERISTICS**

# Absolute Maximum Ratings

SYMBOL	VALUE	UNIT
VCC	220 / 50	V/Hz
$T_{OPR}$	-10 ~ +60	$^{\circ}\!\mathbb{C}$
T <sub>STR</sub>	-25 ~ +70	${\mathbb C}$
	VCC T <sub>OPR</sub>	VCC 220 / 50 T <sub>OPR</sub> -10 ~ +60

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<sup>\*</sup>Effective infrared sensor detection distance up to 1.5m.



# Other Specifications

ITEM	VALUE
Current (mA)	160
Alarm	Light and buzzer
Moving direction judgment	2 infrared sensors

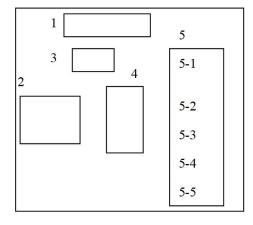
### COMPONENTS

RRU-CH-C16058 is designed upon advanced gate concept. Each gate consists of one main panel and one auxiliary panel. Main panel includes Antenna Array, UHF Fixed Reader, Controller, Infrared Receiver and Motion Detection Unit, Power Source and Interface Port. Auxiliary panel includes Antenna Array, infrared transmitter unit and Interface Port.

RRU-CH-C16058 accessories include AC power cord, Panel link cable, RF cable and RS232 serial communication cable.

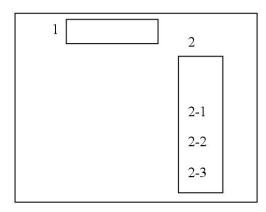
# WIRING INFORMATION

RRU-CH-C16058 main panel basement box:



- 1: infrared receiver and motion detection unit
- 2: controller
- 3: power source
- 4: UHF fixed reader
- 5: interface port
- 5-1: AC power socket
- 5-2: RS232 socket
- 5-3: panel link cable socket
- 5-4: RF cable socket
- 5-5: RF cable socket

# Auxiliary panel basement box:



- 1: infrared transmitter unit
- 2: interface port
- 2-1: panel link cable socket
- 2-2: RF cable socket
- 2-3: RF cable socket



# APPLICATION INFORMATION

RRU-CH-C16058's serial communication parameter: 38400bps, E, 8, 1

Serial communication cable definition:

Pin No.	Symbol	Comment
1	NC	Reserved
2	TXD	RS232 data output
3	RXD	RS232 data input
4	NC	Reserved
5	GND	Ground
6	NC	Reserved
7	NC	Reserved
8	NC	Reserved
9	NC	Reserved

For the details of the serial communication protocol, please refer to RRU-CH-C16058's user manual.

#### Remark:

<sup>1.</sup> Specifications are subject to change, please pay attention to our latest one.

<sup>2.</sup> Shenzhen RoyalRay Science and Technology Co., Ltd. reserves the right to the final interpretation of the above terms.