



# RGR650 Industrial UHF RFID Integrated Reader

## Features:

1. Base on the domestic high-performance RF chip design, Self-intellectual property;
2. Support ISO18000-6C (EPC C1G2) protocol tag;
3. 865~868MHz, 902~928MHz frequency band (frequency customization optional by Soft);
4. FHSS or Fix Frequency transmission;
5. RF output power up to 26dBm (adjustable);
6. 3dBi Circular Antenna with effect distance up to 0~350cm\*;
7. Support active mode, answer mode, trigger-activating and password work mode;
8. Low power dissipation with single +12V DC power supply;
9. Support RS232, RS485, Wiegand, Trigger interface, (Relay, USB, RJ45, WIFI, 4G) Optional;
10. One Relay (Optional) can control Beep, Motor, Light;
11. Support ModBus (only RS232, RS485, RJ45 interface);
12. Support for White List and Read By Time\*;
13. Support read 'ON' temperature tag\*; UHF LED tag\*.

\* Effective distance depends on antenna, tag and environment.

## General Description:

- Model Number: RGR650
- Size: 90 x 94 x 40mm
- RGR650 is a high performance UHF RFID Industrial Reader. It is designed mainly for industrial production process control system.

## Application:

- Industrial production process control
- Production flow-line management
- Attendance management and more
- AGV Car
- Tobacco Management
- Attendance management

## Product Mode Explanation:

Model	Interface
RGR650	Standard(RS232, RS485, Trigger)
RGR650T	Standard with RJ45
RGR650R	Standard with Relay
RGR650W	Standard with WIFI
RGR650U	Standard with USB
RGR650G	Standard with 4G
RGR650G	Standard with 4G
-T: RJ45 -T: RJ45 -W:WIFI -R: Relay -U:USB -G: 4G	

## Characteristics:

Absolute Maximum Rating

ITEM	SYMBOL	VALUE	UNIT
Power Supply	VCC	24	V
Operating Temp.	T <sub>OPR</sub>	-20~+60	°C
Storage Temp.	T <sub>STR</sub>	-40~+85	°C

## Electrical and Mechanical Specification

Under TA=25°C, VCC=+12V unless specified

ITEM	SYMBOL	MIN	TYPE	MAX	UNIT
Power Supply	VCC	8	12	24	V
Current Dissipation	I <sub>c</sub>		400	600	mA
Frequency	FREQ	865		928	MHz

## Product Technical Parameters

### Physical parameters

Dimensions	90x94x40mm
Net Weight	1.5Kg
Gross Weight	2.0Kg
Package size	23*16*13cm
Carton size	48*32.5*28.5cm, 8pcs/carton
Shell material	ABS and Metal
Color	Black

### Environmental parameters

Operation Temperature	-20~+60°C
Storage Temperature	-40~+85%
Humidity	5%~95% RH, Non-condensing
Waterproof Rank	IP65

### Type


Model Number	RGR650
Type	UHF RFID Industrial Reader

## Performance

<b>Frequency</b>	902~928MHz,860~868MHz(frequency customization optional)
<b>Ant.</b>	3 dBi Antenna
<b>RF Power</b>	0 - 26dBm
<b>Read Distance *</b>	0-350cm * Effective distance depends on antenna, tag and environment.
<b>Write Distance *</b>	0-150cm * Effective distance depends on antenna, tag and environment.
<b>Read Rate</b>	200cnt / second
<b>Read Type</b>	ISO18000-6C (EPC Gen2)
<b>Reading Prompt</b>	Buzzer
<b>Working Voltage</b>	DC +9 - 24V, 5W
<b>Work Mode</b>	ctive mode, Answer mode, Trigger mod, Password mode
<b>Communication</b>	RS232, RS485, WG26, WG34, Trigger, Relay(Optional), RJ45(Optional), WIFI(Optional),USB(Optional),4G(Optional)
<b>Read Function</b>	Support for White List and Read By Time*
<b>Other ta g type</b>	Support read 'ON' temperature tag*; UHF LED tag*.
<b>Net</b>	RJ45 support TCP Client/Server,,HTTP, MQTT, Modbus, DNS, DHCP. WIFI support TCP Client,HTTP, MQTT. 4G support TCP Client,HTTP, MQTT. LLRP(Optional)

## SDK

SDK	Support X86 & X64, C++, C#, VB, Delphi, Linux, ARM, Python, NodeJS, QT, JAVA, Android, Modbus.
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## Interface

Item	Comment	Item	Comment
<b>Red</b>	VCC (DC 9V - 24V)	<b>Green</b>	Wiegand DATA1
<b>Black</b>	GND	<b>Gray</b>	GND
<b>White</b>	RS232 TXD	<b>Pink</b>	RS485 A+
<b>Purple</b>	RS232 RXD	<b>Orange</b>	RS485 B-
<b>Brown</b>	GND	<b>Aqua</b>	Trigger input+ (TTL level)
<b>Yellow</b>	Wiegand DATA0	<b>Blue</b>	Trigger input- (TTL level)