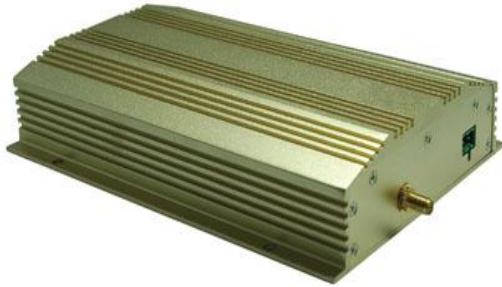


## GENERAL DESCRIPTION

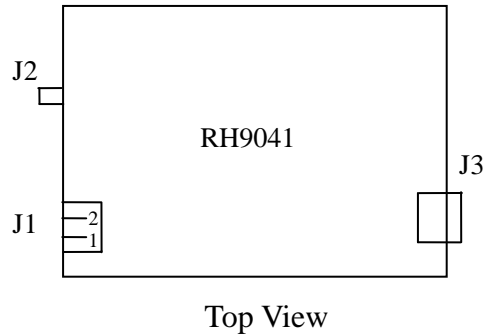


CF-RH9041 is a high performance ISO15693 protocol HF tag reader. It is designed upon fully self-intellectual property. Based on proprietary efficient anti-collision algorithm, it supports fast tag read/write operation with high identification rate. It can be widely applied in many RFID application systems such as logistics, personnel identification, conference attendance system, access control, anti-counterfeit and industrial production process control system.

## FEATURES

- Self-intellectual property;
- Support mainstream ISO15693 protocol tag (TI, PHILIPS, ST, INFINEON, FUJITSU, EM...);
- RF output power over 4W;
- Advanced anti-collision algorithm. High identification rate with tag processing speed 30~50pcs/s);
- SMA RF interface to support standard 50ohm RFID antenna. Effective distance up to 90cm;
- Support TRANSPARENT COMMAND;
- Support optional DPPM and WPPM;
- Support multiple readers network;
- Low power dissipation;
- Provide DLL and demonstration software to facilitate development

## INTERFACE DESCRIPTION



### 1. Power Supply Socket J1

No.	SYMBOL	COMMENT
J1-1	PWR	+11.6~15V
J1-2	GND	Ground

### 2. SMA Antenna Socket J2

### 3. Communication Socket J3

Standard DB9 Female Socket to be directly connected to the host.

No.	SYMBOL	COMMENT
1	G_IN1	General TTL level input with internal 20k $\Omega$ pull-up resistor to +5V
2	TXD (R-)	RS232 serial data output or RS485 R-
3	RXD (R+)	RS232 serial data input or RS485 R+
4	G_OUT1	General TTL level output with drive/sink 5mA current (max.)
5	GND	Ground
6	G_OUT2	General TTL level output with drive/sink 5mA current (max.)
7	COMMON	Common contact of built-in relay
8	N_C	Normally close contact of built-in relay
9	N_O	Normally open contact of built-in relay

## CHARACTERISTICS

### ● Absolute Maximum Rating

ITEM	SYMBOL	VALUE	UNIT
Power Supply	VCC	16	V
G_IN1、G_OUT1、G_OUT2 I/O Voltage	V <sub>IO</sub>	7	V
Operating Temp.	T <sub>OPR</sub>	-25~+60	°C
Storage Temp.	T <sub>STR</sub>	-25~+80	°C

### ● Electrical and Mechanical Specification

Under  $T_A = 25^\circ\text{C}$ ,  $V_{CC} = +12.6\text{V}$  unless specified

ITEM	SYMBOL	MIN	TYP	MAX	UNIT
Power Supply	VCC	11.6	12.6	15	V
Current Dissipation	$I_C$		0.8	1.2	A
Frequency	$F_{REQ}$		13.56		MHz
Effective Distance*	DIS	0	900	1000	mm
G_IN1 Input Level	$V_{IH}$	3.5	2.6		V
	$V_{IL}$		2.3	1.55	V
G_OUT1, G_OUT2 Output Current	$\pm I_O$			5	mA
G_OUT1, G_OUT2 Output Level	$V_{OH}(I_O = -5\text{mA})$	3.95			V
	$V_{OL}(I_O = 5\text{mA})$			0.73	
Relay	Rated Load	$C_{LOAD}$		0.5A at 125VAC 1A at 24VDC	
	Operating Voltage			125VAC 60VDC	V
	Operating Current			1	A
Size	L x W x H		215 x 138 x 39		mm

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