UHF High Performance Desktop Reader

Model: RRU9816

Size: 122.4mmx84mmx20/15mm

Weight: 100g

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GENERAL DESCRIPTION

RRU9816 is a high performance UHF Desktop reader. It is designed upon dedicated RFID Engine ASIC with fully self-intellectual property. Based on proprietary efficient digital signal processing 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, access control, anti-counterfeit and industrial production process control system.

FEATURES

- Self-intellectual property;
- 865~868MHz or 902~928MHz frequency band(frequency customization optional);
- Support ISO18000-6C(EPC C1G2) protocol tag;
- FHSS or Fix Frequency transmission, support RSSI;;
- Effective range from 10~50cm (adjustable according to real application need);
- Multiple tag anti-collision>50pcs/s;
- Multiple tag inventory speed>50pcs/s;
- Tag buffer size: 370PCS@Max.128bitsEPC or 120PCS@Max.496bitsEPC;
- Low power dissipation with USB power source or external single +9 DC power supply;
- Support 2 GPIO;
- Support USB (VSP mode), RS232, Wiegand (optional) and USB HID (keyboard emulation)
- High reliability design without extra heat-sinking measure;
- Support 24hoursX365days working;
- Support on-the-site firmware upgrading.

MECHANICAL DATA (UNIT mm)：
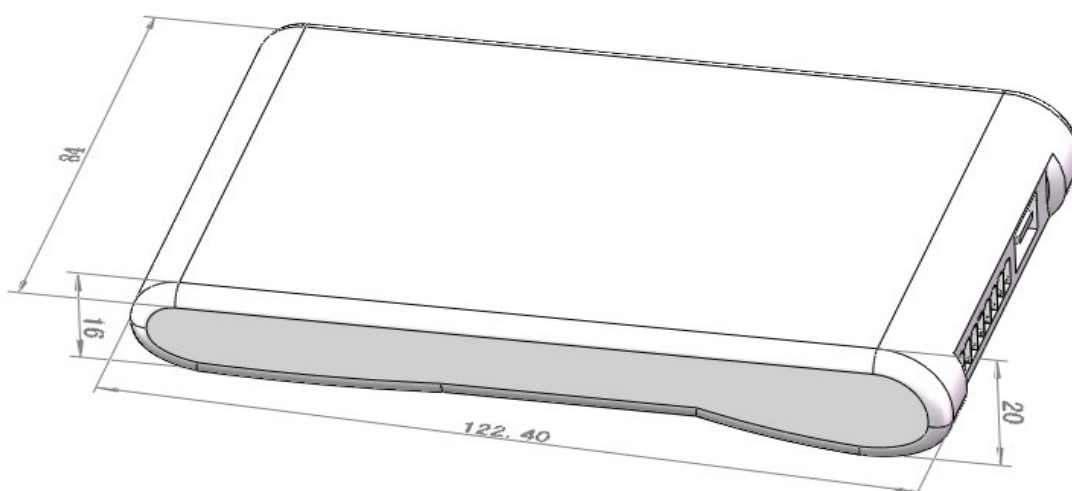
CHARACTERISTICS

● **Absolute Maximum Rating**

ITEM	SYMBOL	VALUE	UNIT
Power Supply	VCC (USB power source)	6	V
	VCC(External power source)	12	
Operating Temp.	T_{OPR}	-10~+70	℃
Storage Temp.	T_{STR}	-20~+85	℃

● **Electrical Specification**

ITEM	SYMBOL	MIN	TYP	MAX	UNIT
Power Supply	VCC (USB powered)	4.5	5	5.5	V
	VCC (External supply)	7	9	12	V
Current dissipation	I_C		180	200	mA
Frequency	F_{REQ}	865	865~868 902~928	928	MHz
RF power	P_{RF}	0		26	dBm
RF power Accuracy	AP		+/-1		dB
RF power Flatness	FP		+/-0.2		dB
Receiving Sensitivity	SR		-70		dBm
Size	L×W×H		122.4*84*20		mm

INTERFACE

1. Socket Definition

Pin1   Pin8   USB
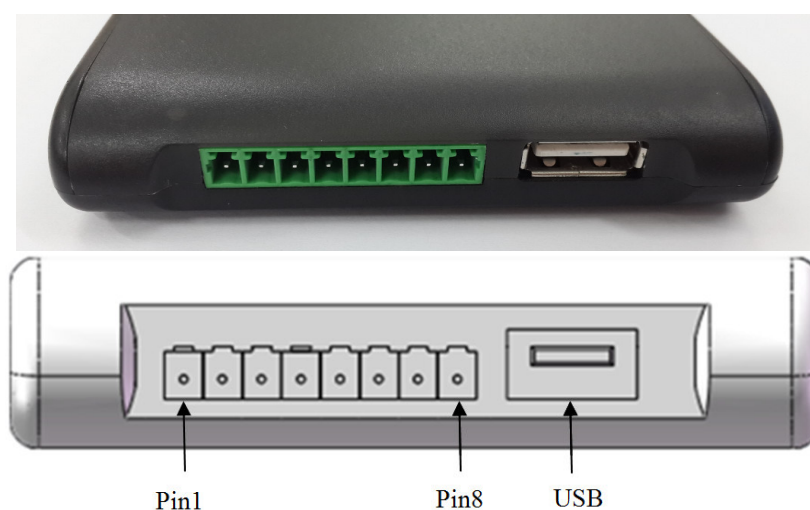
No.	Symbol	Comment
1	VCC	External +9V power supply
2	GND	Ground
3	TXD	RS-232 serial data output
4	RXD	RS-232 serial data input
5	GND	Ground
6	GPIO1	GPIO1 or Wiegand Data 0
7	GPIO2	GPIO2 or Wiegand Data 1
8	GND	Ground

2. Switch Definition
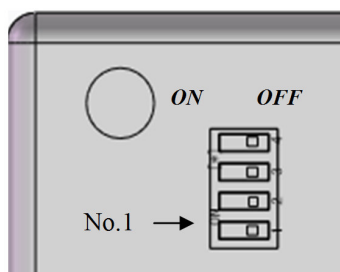
No.	Symbol	Comment
1	SEL_USB	Switch on to enable USB interface
2	SEL_USB	
3	SEL_RS232	Switch on to enable RS232 interface
4	SEL_RS232	

Remark:

1. Specifications are subject to change, please pay attention to our latest version.

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