

# USB UHF Desktop Reader



**Model: RRU3009USB-L**

**Size: 140.8 x 69.5 x 12.1mm**

## GENERAL DESCRIPTION

The RRU3009USB-L is a UHF (Ultra-High Frequency) desktop RFID reader for electronic tags, designed with fully independent intellectual property rights and incorporating proprietary efficient signal processing algorithms. While maintaining a high read rate, it enables rapid reading and writing of electronic tags, making it widely applicable to various RFID systems including retail, item management, logistics, anti-counterfeiting systems, and production process control.

## FEATURES

- Self-intellectual property;
- Support ISO18000-6C(EPC C1G2) protocol tag;
- 902~928MHz or 865~868MHz frequency band(frequency customization optional);
- FHSS or Fix Frequency transmission;
- Low power consumption design, powered by USB;
- Support RSSI;
- RF output power up to 23dbm(adjustable);
- Equipped with an internal ceramic antenna, achieving a reading distance of up to 80CM\* (with E41 tags);
- Supports USB 2.0 interface;
- High stability, featuring air-cooled heat dissipation, eliminating the need for external heat sinks;
- Capable of continuous operation for 24 hours a day, 365 days a year;
- Supports online Firmware upgrades.

*\*Effective distance varies with tags and the working environment.*

## CHARACTERISTICS

- **Absolute Maximum Ratings**

ITEM	SYMBOL	VALUE	UNIT
Power Supply	VCC	6	V
Operating Temp	T <sub>OPR</sub>	-20 ~ +60	°C
Storage Temp	T <sub>STR</sub>	-20 ~ +70	°C

## ● Electrical and Mechanical Specification

Under TA=25°C, VCC=+9V unless specified

ITEM	SYMBOL	MIN	TYP	MAX	UNIT
Power Supply	VCC		5		V
Operating Current	I <sub>c</sub>	110	20 (standby)	310	mA
Operating Frequency	F <sub>REQ</sub>	-	865~868(ETSI) 902~928(FCC)	-	MHz
RF Output Power	P <sub>RF</sub>	5		23	dBm
Receiver Sensitivity	SR		-69		dBm

## INTERFACE

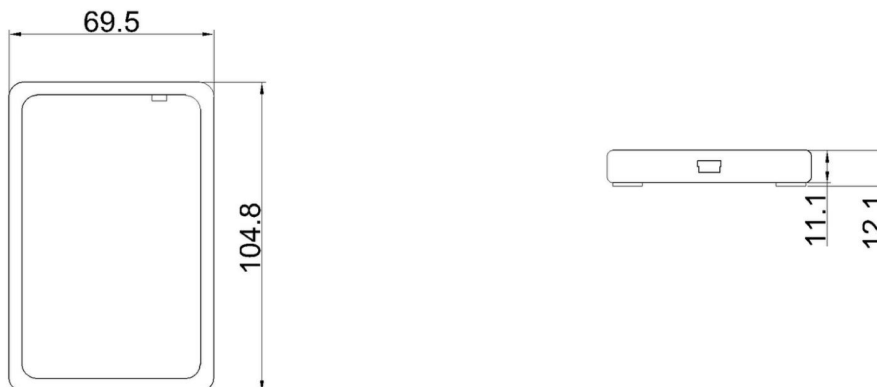


### 1. USB

### 2.LED

NO.	SYMBOL	DESCRIPTION
1	PWR	Upon powering on, the indicator light remains solid (red).
2	WORK	Upon powering on, the light flashes once and then turns off; the light flashes (green) when a card is read.

## MECHANICAL DATA (UNIT:mm)



### Remark:

- Specifications are subject to change, please pay attention to our latest version.
- Shenzhen RoyalRay Science and Technology Co., Ltd. reserves the right to the final interpretation of the above terms.