

## USB UHF RFID Desktop Reader STA IR9816

### GENERAL DESCRIPTION

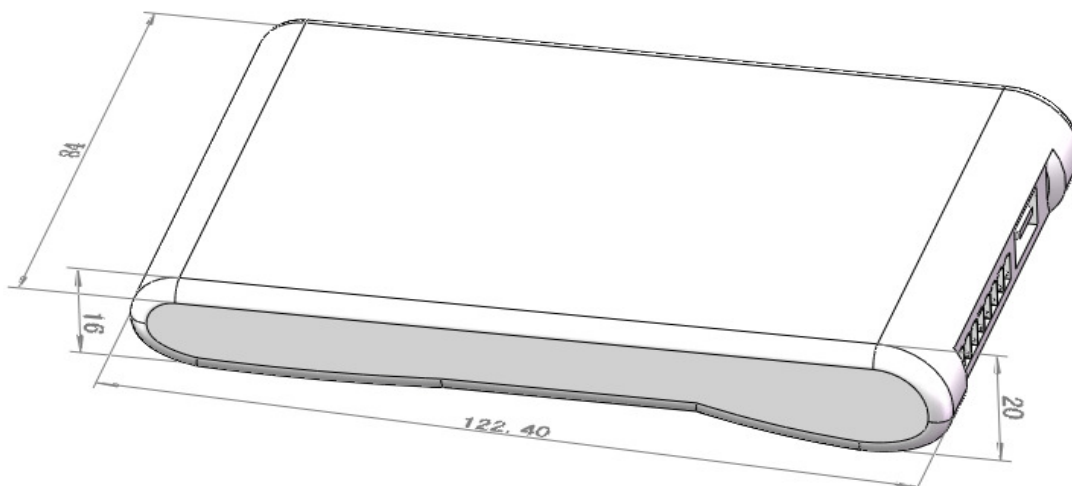
STA IR9816 is a high performance UHF RFID reader. It is designed upon dedicated RFID Engine ASIC. Based on proprietary efficient digital signal processing algorithm, it supports fast tag read/write operation with high identification rate. It can be widely applied in many RFID application systems such as logistics, access control, anti-counterfeit and industrial production process control system.



### FEATURES

- Self-intellectual property;
- Support ISO18000-6C(EPC C1G2) protocol tag;
- 902~928MHz or 865~868MHz frequency band(frequency customization optional);
- FHSS or Fix Frequency transmission;
- Effective range from 10~200cm (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 RSSI;
- Support 2 GPIO;
- Support USB (Virtual Serial Port mode), RS232, Wiegand (optional) and USB HID (keyboard wedge emulation)
- High reliability design without extra heat-sinking measure;
- Support on-the-site firmware upgrading.
- Size: 122.4mmx84mmx20mm

### 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 <sub>OPR</sub>	-10~+70	°C
Storage Temp.	T <sub>STR</sub>	-20~+85	°C

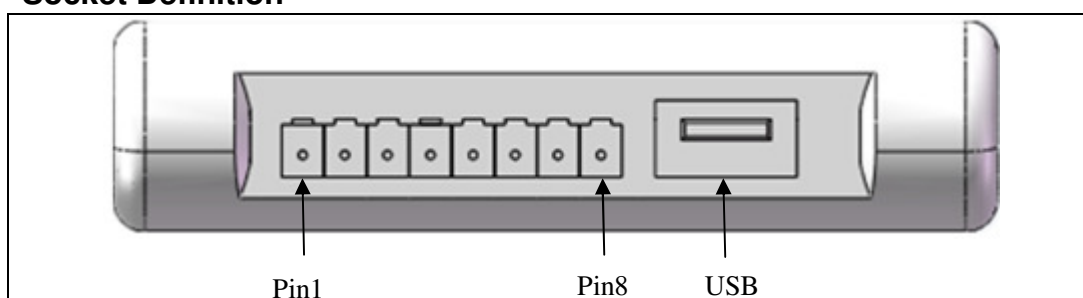
### ● Electrical Specification

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 <sub>C</sub>		180	380	mA
Frequency*	F <sub>REQ</sub>	902		928	MHz
RF power	P <sub>RF</sub>	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

\*European Frequency band (865M~868MHz) optional

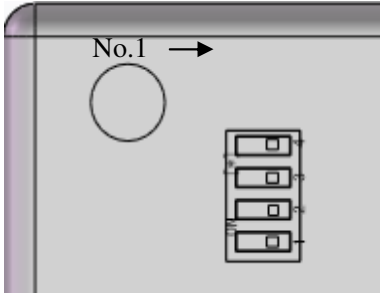
## INTERFACE

### 1. Socket Definition



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	

