

## Ex10 Fixed Reader(4-Port)



**Model: RRU7881ADV**

**RRU5881ADV**

**RRU3881ADV**

**Size: 310mm×210mm×41mm**

## GENERAL DESCRIPTION

RRU7881ADV/RRU5881ADV/RRU3881ADV is a high-performance UHF RFID Reader. It is designed upon 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, and industrial production process control system.

## FEATURES

- Self-intellectual property;
- Designed with IMPINJ E710/E510/E310 and support ISO18000-6C(EPC C1G2) protocol tag, featuring excellent multi-tag anti-collision functionality;
- 865~868MHz/902~928MHz frequency band(frequency customization optional);
- FHSS or Fix Frequency transmission;
- RF output power up to 33dbm(adjustable);
- Effective distance up to 12m\*(with external 8dbi antenna and tag E41);
- Maximum inventories speed up to 1000pcs/s (using E710) or 600pcs/s (using E510) or 350 pcs/s (using E310);
- Tag buffer size up to 1000PCS@96bits EPC;
- Support RSSI, TNC sockets for 4 external antennae;
- Low power dissipation with single +8~24VDC power supply;POE Optional;
- 4 lines GPIO interface (2 input 2 output) ;
- Support RS232, RS485, USB (Slave), TCP/IP interface, with WiFi and some other communication ports for choice;
- Support on-the-site firmware upgrading;
- Support DLL , demonstrate the software source code and secondary development.

*\*Effective reading distance and tag interrogation speed are directly related to the antenna, tags, and the working environment.*

## CHARACTERISTICS

### ● Absolute Maximum Ratings

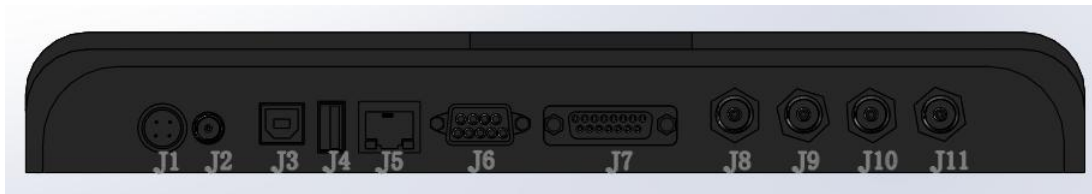
ITEM	SYMBOL	VALUE	UNIT
Power Supply	VCC	26	V
Operating Temp	T <sub>OPR</sub>	-20 ~ +65	°C
Storage Temp	T <sub>STR</sub>	-40 ~ +85	°C

## ● Electrical and Mechanical Specification

Under  $T_A=25^{\circ}\text{C}$ ,  $V_{CC}=+9\text{V}$  unless specified

ITEM	SYMBOL	MIN	TYP	MAX	UNIT
Power Supply	VCC	8	9	24	V
Current Dissipation	I <sub>c</sub>	330		1000(30dBm) 1300(33dBm)	mA
Frequency	F <sub>REQ</sub>	-	865~868(ETSI) 902~928(FCC)	-	MHz
RF Output Power	P <sub>RF</sub>	5		33	dBm
Receive Sensitivity	SR		-74(using E310) -81(using E510) -87(using E710)		dBm

## INTERFACE



### 1. Power (DC Jack) J1

NO.	SYMBOL	COMMENT
2	PWR	Power Supply
4	GND	Ground
1,3	NC	Reserved

### 2. WiFi antenna Interface J2 (SMA Female)

### 3. USB J3 (Slave)

### 4. USB J4 (Reserved)

### 5. TCPIP Network(RJ45) J5

### 6. UART ( RS232 DB9 Female)

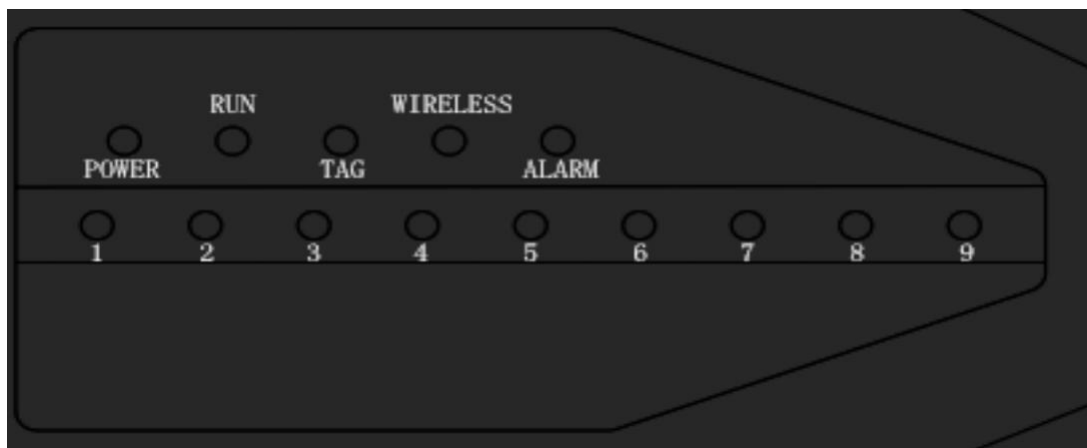
NO.	SYMBOL	COMMENT
1	NC	Reserved
2	TXD	Serial data Output
3	RXD	Serial data Input
4	NC	Reserved
5	GND	Ground
6	NC	Reserved
7	NC	Reserved
8	NC	Reserved
9	NC	Reserved

## 7. GPIO J7 (DB15 Female)

NO.	SYMBOL	COMMENT
1	Output1	General Outputs 1
2	Output2	General Outputs 2
3	Output3	General Outputs 3
4	Output4	General Outputs 4
5	Input1	General Input1 with Internal 47k resistor pulled-down to ground
6	Input2	General Input2 with Internal 47k resistor pulled-down to ground
7	Input3	General Input3 with Internal 47k resistor pulled-down to ground
8	Input4	General Input4 with Internal 47k resistor pulled-down to ground
9	TGIN	Trigger input with internal 10k resistor pulled-up to +5V
10	R+	R+ in RS485
11	R-	R- in RS485
12	GND	Ground
13	NC	Normal-Close terminal of internal relay
14	NO	Normal-Open terminal of internal relay
15	CM	Common terminal of internal relay

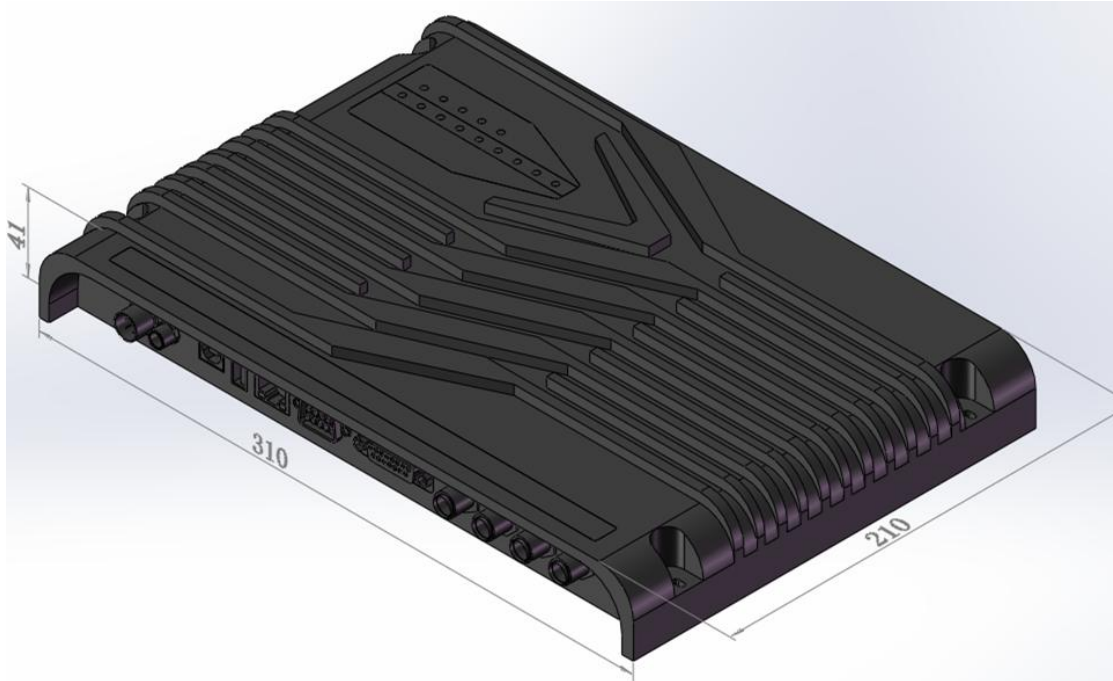
## 8. TNC Antenna Port( ANT1~ANT4) J8~J11

## LED INDICATOR



Symbol	Comment
POWER	Power on indicator
RUN	Command-executing indicator
TAG	Tag-detected indicator
WIRELESS	WiFi active indicator
ALARM	Alarm indicator
1~9	RSSI indicator

## MACHANICAL DATA (UNIT: mm)



## ACCESSORY



RS232 cable \* 1pcs



USB Cable \* 1pcs



Power Adapter \* 1pcs



Power Cable \* 1 pcs

**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..