UHF High Performance Fixed Reader
FR1200-E

Size：268/240 x 181 x 28 mm

Weight: 1180g

GENERAL DESCRIPTION

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, anti-counterfeit and industrial production process control system.

FEATURES

- 860~960MHz frequency band (frequency customization optional);
- Based on Impinj E710 high performance RF engine, excellent multi-tag anti-collision operation, fully support EPC CLASS1 G2 protocol tags;
- FHSS or Fix Frequency transmission, support RSSI;
- RF output power up to 33dbm (adjustable);
- Inventory speed > 1000 tags/s at peak (shall be accordance with the working environment, tags, antenna, etc. at site);
- Tag buffer: 1000pcs@96bitsEPC;
- Support 4 TNC antenna port with antenna failure detection;
- Low power dissipation with single +9 DC power supply, POE (Power over Ethernet) is optional;
- Support RS232, USB(Slave), RJ45 (TCP/IP), provide WiFi and other interface for choice;
- Provide DLL and Demonstration Software Source code to facilitate further development;
- High reliability design, meet the requirements of harsh working environment.

CHARACTERISTICS

- **Absolute Maximum Rating**

ITEM	SYMBOL	VALUE	UNIT
Power Supply	VCC	16	V
Operating Temp.	T_{OPR}	-20~+55	°C
Storage Temp.	T_{STR}	-20~+85	°C

- **Electrical and Mechanical Specification**

  Under T_A＝25℃，VCC＝+9V unless specified

ITEM	SYMBOL	MIN	TYP	MAX	UNIT
Power Supply	VCC	9		15	V
Current Dissipation	IC		1.5	2	A
Frequency	F_{REQ}		860~868(ETSI) 902~928(FCC)		MHz
RF output power	Prf	5		33	dBm
Receive Sensitivity	RS		-87		dBm

MECHANICAL DATA

240mm

30mm

181mm

116mm

253mm

268mm

28mm
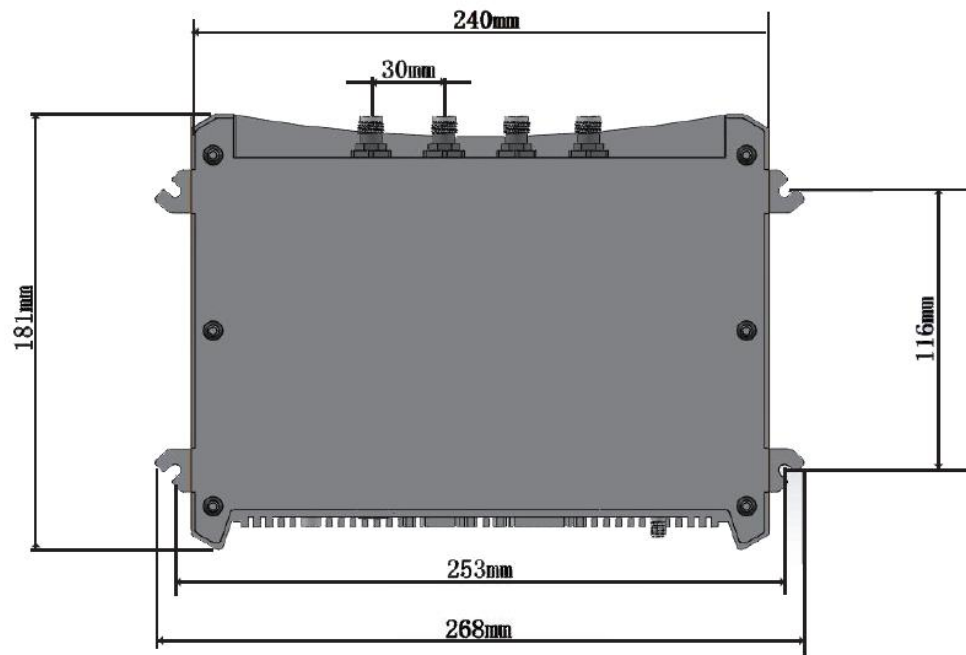
INTERFACE
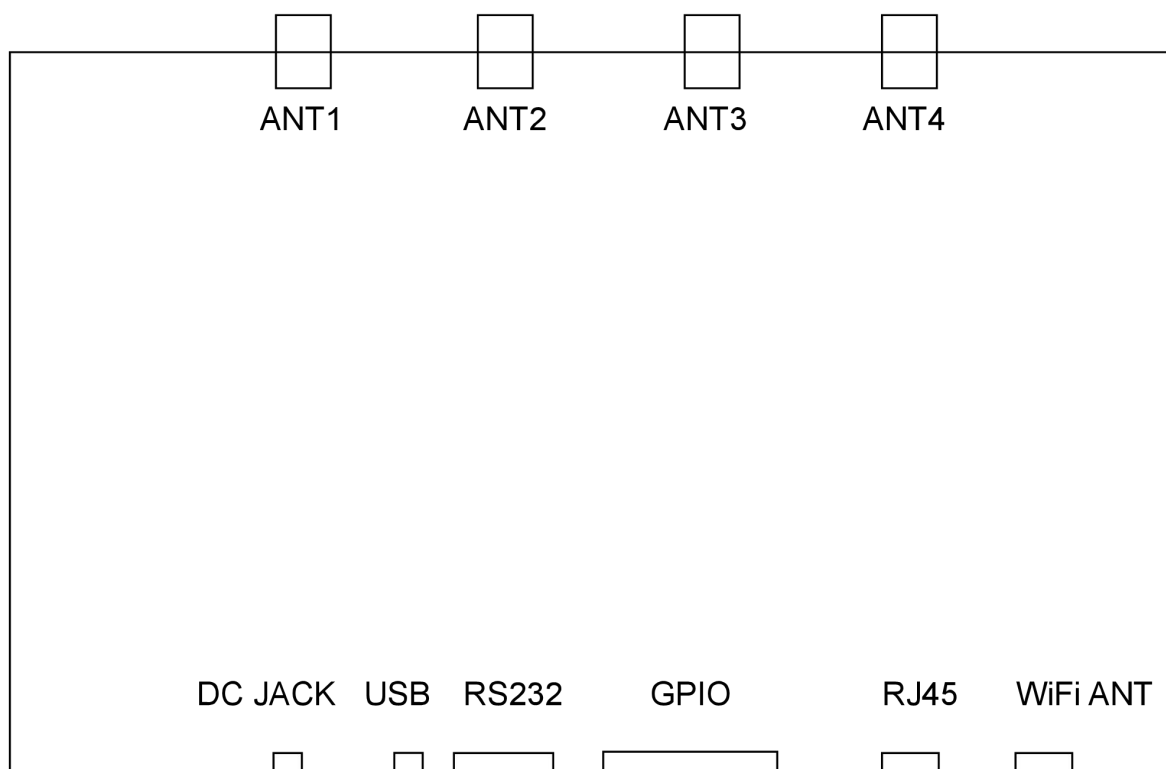
1．Power (DC JACK)

No.	Symbol	Comment
Central	PWR	+9V DC
Outer	GND	Ground

2．USB (Slave)

3．UART (RS232 DB9 Female)

No.	Symbol	Comment
1	NC	Reserved
2	TXD	Data output in RS232
3	RXD	Data input in RS232
4	NC	Reserved
5	GND	Ground
6	NC	Reserved
7	NC	Reserved
8	NC	Reserved
9	NC	Reserved

4．GPIO （DB15 Female）

No.	Symbol	Comment
1	NC	Reserved
2	NC	Reserved

3	Input12-	General OPTO-coupler isolated input -
4	Input1-	General OPTO-coupler isolated input -
5	Output1	General OPTO-coupler isolated Output1
6	Output1	General OPTO-coupler isolated Output1
7	Output2	General OPTO-coupler isolated Output2
8	Output2	General OPTO-coupler isolated Output2
9	Input2+	General OPTO-coupler isolated input+
10	Input1+	General OPTO-coupler isolated input+
11	NC	Reserved
12	GND	Ground
13	NC	Reserved
14	NC	Reserved
15	NC	Reserved

5．TCPIP network (RJ45)

6．TNC antenna port (ANT1~ANT4)

7．WiFi Antenna (optional)

ACCESSORIES

RS232 cable * 1pcs   USB Cable * 1pcs   Power Adapter * 1pcs   Power Cord * 1 pcs