High Performance
UHF RFID Fixed Reader

Model: FU0042

Size: 268/240 x 181 x 28 mm

Weight: 1500g

Xiamen Innov Information Science & Technology Co. LTD Tel：+86 592 3136888
Add:Xminnov IOT Industrial Park, No.943, Tonglong second road, Tong'an District, Xiamen, www.rfidtagworld.com

Introduction

FU0042 is a high-performance UHF electronic tag reader and writer. It is designed with completely independent intellectual property rights and combined with a proprietary efficient signal processing algorithm to achieve rapid reading and writing of electronic tags while maintaining a high reading rate, can be widely used in various radio frequency identification (RFID) systems such as logistics, access control systems, anti-counterfeiting systems and production process control.

Features

- Completely independent intellectual property design;
- Working frequency 840~960MHz (can be adjusted according to the requirements of different countries or regions);
- Based on Impinj E710 reading and writing engine design, fully supports RFID tags that comply with EPC CLASS1 G2 standard;
- Works in Frequency Hopping Spread Sprectrum (FHSS) or fixed frequency transmission mode;
- The output power is software-adjustable, with a step interval of 1db, and a maximum of 33dbm;
- Reading distance >10m (external 6dBiL antenna, RFID tag E41);
- Support RSSI;
- Peak tag query speed >1000 images/second (please refer to the actual working scenario, tags, antennas, etc.);
- Tag buffer area 1000 tags @ 96bit EPC;
- Supports response working mode and real-time inspection working mode;
- Supports two anti-collision modes, EPC and TID;
- Supports 8 external TNC antenna interfaces, supports automatic antenna fine-tuning and antenna detection;
- Low power consumption design, single +9V power supply, optional POE power supply mode;
- Supports RS232, USB (Slave), RJ45 (TCP/IP); WiFi and other communication interfaces optional;
- Support Firmware online upgrade;
- Provides dynamic link library (DLL) and demonstration software source code to support secondary development.

Electrical properties

- **Limit parameters**

Item	Symbol	Numerical Value	Unit
Voltage	VCC	16	V

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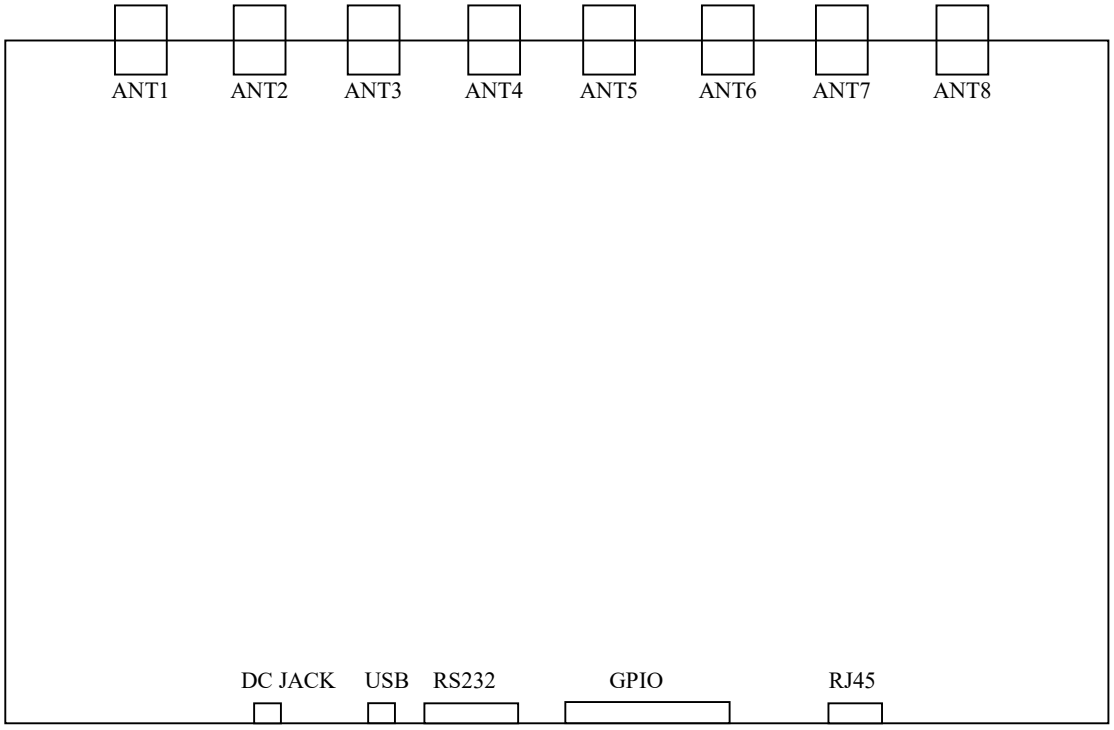
Operating Temperature	T_{OPR}	-20～+55	℃
Storage temperature	T_{STR}	-20～+85	℃

- **Specification**

  Unless otherwise specified, the specifications shown are taken under the operating conditions of TA=25℃ and VCC=+9V

ITEM	Symbol	Min	Typical	Max	Unit
Voltage	VCC	8	9	12	V
Working Current	IC		0.5	1.2	A
Working Frequency	F_{REQ}	840	860~868 902~928	960	MHz

Interface



1. Power Adapter: DC JACK

SN	Symbol	Description
Central	PWR	Positive 9V power supply
Outer	GND	GND

2. USB interface

3. Serial communication interface RS232 （DB9 Female）

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SN	Symbol	Description
1	NC	Reserved
2	TXD	Serial communication data output
3	RXD	Serial communication data input
4	NC	Reserved
5	GND	Signal ground
6	NC	Reserved
7	NC	Reserved
8	NC	Reserved
9	NC	Reserved

4. Universal input and output interface GPIO （DB15 Female）

SN	Symbol	Description
1	NC	Reserved
2	NC	Reserved
3	Input2－	Universal optocoupler isolation input terminal 2-
4	Input1－	Universal optocoupler isolation input terminal 1-
5	Output1	Universal optocoupler isolation output 1
6	Output1	Universal optocoupler isolation output 1
7	Output2	Universal optocoupler isolation output 2
8	Output2	Universal optocoupler isolation output 2
9	Input2＋	Universal optocoupler isolation input terminal 2+
10	Input1＋	Universal optocoupler isolation input terminal 1+
11	NC	Reserved
12	GND	Signal ground
13	NC	Reserved
14	NC	Reserved
15	NC	Reserved

5. TCPIP Ethernet interface RJ45

6. TNC antenna interface ANT1~ANT8

Accessories

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RS232 cable*1

USB cable*1

Power Adapter*1

Power Cable*1

Note:
1. If the manual changes, please refer to the latest version.
2. Xiamen Innov Information Technology Co., Ltd. reserves the right of final interpretation.

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