UHF High Performance Fixed Reader

Model：LT-DS814

Size：268mmx181mmx28mm

Weight: 1180G

GENERAL DESCRIPTION

Elfday UHF High Performance Fixed Reader LT-DS814 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. LT-DS814 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;
- 840~960MHz frequency band (frequency customization optional);
- Based on Impinj R2000 high performance RF engine, excellent multi-tag anti-collision operation, fully support EPC CLASS1 G2 \ ISO18000-6B protocol tags
- FHSS or Fix Frequency transmission, support RSSI, Maximum inventory speed over 700pcs;
- RF output power up to 33dbm (adjustable);
- Support 4 TNC antenna port with antenna auto-tuning and failure-detection;
- Support answer and real-time-inventory work mode;
- Tag buffer: 1000pcs@96bitsEPC;
- Support EPC and TID anti-collision mode
- Low power dissipation with single +9 DC power supply, POE (Power over Ethernet) is optional;
- Support RS232, USB(Slave), RJ45 (TCP/IP) interface;
- 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**

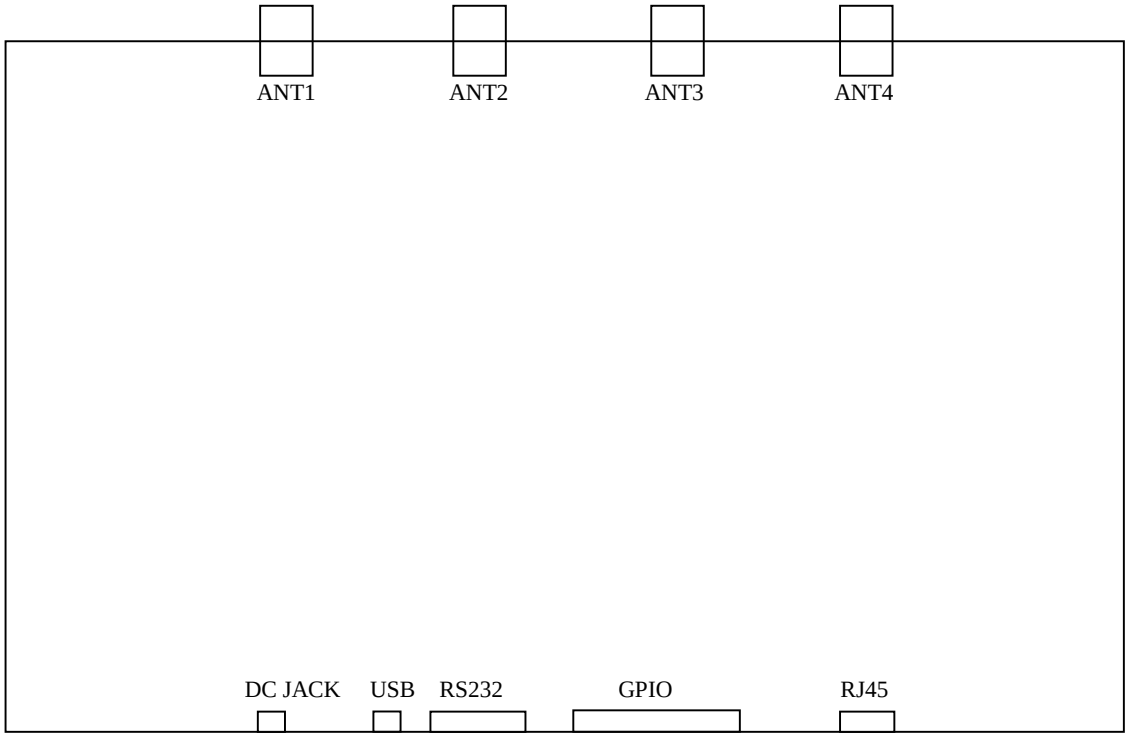
ITEM	SYMBOL	VALUE	UNIT
Power Supply	VCC	16	V
Operating Temp.	T_{OPR}	-20~+55	℃
Storage Temp.	T_{STR}	-20~+85	℃

- **Electrical and Mechanical Specification**

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

ITEM	SYMBOL	MIN	TYP	MAX	UNIT
Power Supply	VCC	8	9	12	V
Current Dissipation	IC		0.5	1.2	A
Frequency	F_{REQ}	840	860~868 902~928	960	MHz
Size	L x W x H		268 x181 x28		mm

INTERFACE



1. Power (DC JACK)

No.	Symbol	Comment
Central	PWR	+9VDC
Outer	GND	Ground

2. USB

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	Input1－	General OPTO-coupler isolated input -
4	Input2－	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	Input1＋	General OPTO-coupler isolated input+ with internal pull-up to 3.3V through a 1k resistor
10	Input2＋	General OPTO-coupler isolated input+ with internal pull-up to 3.3V through a 1k resistor
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

Remark:

1. Specifications are subject to change, please pay attention to our latest one.

FCC Warnning:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection againstharmful interference in a residential installation. This equipment generates, uses and can radiateradio frequency energy and, if not installed and used in accordance with the instructions, maycause harmful interference to radio communications. However, there is no guarantee thatinterference will not occur in a particular installation. If this equipment does cause harmfulinterference to radio or television reception, which can be determined by turning the equipmentoff and on, the user is encouraged to try to correct the interference by one or more of thefollowing measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1)This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.