

UF2889N Fixed UHF RFID Reader



GENERAL DESCRIPTION

UHF High Performance Fixed Reader SID-UF2889N 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. SID-UF2889-Lite 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);
- High performance RF engine, excellent multi-tag anti-collision operation
- FHSS or Fix Frequency transmission with maximum inventory speed over 700pcs;
- Support RSSI; RFID FCC certificated follow FCC Part 15.247
- Support 8 TNC antenna port with antenna failure detection
- Tag buffer: 1000pcs@96bitsEPC
- Low power dissipation with single +9 DC power supply
- Provide DLL and Demonstration Software Source code to facilitate further development; (SDK) set.
- High reliability design, meet the requirements of harsh working environment.

Physical Characteristics

Length :	268 mm.
Width :	181 mm.
Height :	28 mm.
Weight :	1,200 g.
LED Status Indicator :	Power Indicator Light, Status Indicator Light

Environmental

Operating Temperature :	-20+55 °C
Storage Temperature :	-20+85 °C
Relative Humidity :	5% to 95% (non-condensing)

Connectivity

Communication :	10/100 BaseT Ethernet RS232, USB for Configuration (Slave), RJ45
Input Power :	(TCP/IP) Interface; PoE (802.3af Compliant), DC Power Input 12VDC Max

RF Characteristics

RF Characteristics :	8 TNC Antenna Ports Support failure detection
Output Power :	1 to 33 dBm (Adjustable)
Frequency Range :	FCC 902-928 MHz, 860-868 MHz (Adjustable)

Software Platform

Passive UHF Tag Air Interface	ISO18000-6B EPC Class 1 Gen 2
Protocols :	Impinj R2000
RFID Chip :	

Regulator Approval & Compliance

Model :	SID-UF2889N
EMC :	Class A - FCC Part 15
Safety :	IEC 62368-1

Absolute Maximum Rating :

ITEM	SYMBOL	VALUE	UNIT
Power Supply	VCC	16	V

Electrical and Mechanical Specification

Under TA=25°C, 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	FREQ	840	860~868 902~928	960	MHz

INTERFACE :



1. Power (DC JACK)

No	Symbol	Comment
Outer	PWR	+9VDC
Current Dissipation	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~ANT8