UHF High Performance Integrated Reader

Name: UHF High Performance Integrated Reader

Model Number: WBN-LDY0902

Size: 260 x 260 x 78mm

General Description:

WBN-LDY0902 is a high performance UHF RFID integrated reader. It is designed upon fully self-intellectual property. Based on efficient DSP 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.

Application:

♦Vehicle no-stop toll management (car parking lot)

♦Logistics and warehouse management

♦Production flew-line management

♦Animals' recording management

♦Products anti-counterfeiting detection

Other field:

♦Club management

♦Library management

♦School and factory access control

♦Attendance management and more

Features:

1. Self-intellectual property;

2. Support ISO18000-6C (EPC C1G2) protocol tag;

3. 865~868MHz, 902~928MHz frequency band (frequency customization optional by Soft);

4. FHSS or Fix Frequency transmission;

5. RF output power up to 30dBm (adjustable);

6. 9dBi circular antenna with effect distance up to 0m~12m*;

7. Support active mode, answer mode, trigger-activating and password work mode;

8. Low power dissipation with single +12V DC power supply;

9. Support RS232, RS485, Wiegand interface, Relay, USB, RJ45, WIFI, POE,4G;

10. One Relay (Optional) can control Beep, Motor, Light.

11. Support ModBus (only RS232, RS485, RJ45 interface).

Effective distance depends on antenna, tag and environment.

Product mode explanation:

Model	Interface
WBN-LDY0902	Standard(RS232, RS485, Wiegand,Trigger)
WBN-LDY0902T	Standard with RJ45
WBN-LDY0902W	Standard with WIFI
WBN-LDY0902TW	Standard with RJ45 and WIFI
WBN-LDY0902TP	Standard with RJ45 and POE
WBN-LDY0902TPW	Standard with RJ45 and POE and WIFI
WBN-LDY0902R	Standard with Relay
WBN-LDY0902U	Standard with USB(HID & Keyboard)
WBN-LDY0902G	Standard with 4G
-T: RJ45 -W:WIFI -P:POE –R: Relay –U:USB –G: 4G	

Characteristics:

Absolute Maximum Rating

| ITEM	SYMBOL	VALUE	UNIT
Power Supply	VCC	24	V
Operating Temp.	T_{OPR}	-20～+60	℃
Storage Temp.	T_{STR}	-40～+85	℃

Electrical and Mechanical Specification

Under TA = 25℃，VCC = +12V unless specified

ITEM	SYMBOL	MIN	TYPE	MAX	UNIT
Power Supply	VCC	8	12	24	V
Current Dissipation	I_C		600	1000	mA
Frequency	F_{REQ}	865		928	MHz

Product Technical Parameters

Type	
Model Number	WBN-LDY0902
Type	UHF High Performance Integrated Reader
Physical parameters	
Dimensions	260x260x78mm
Net Weight	4.0Kg
Gross Weight	4.5Kg
Package size	40.5*30.5*10.5cm
Shell material	PVC
Color	Gray White
Environmental parameters	
Operation Temperature	-20~+60℃
Storage Temperature	-40~+85℃
Humidity	5%～95% RH, Non-condensing
Waterproof Rank	IP65
Performance	
Frequency	902~928MHz,860~868MHz(frequency customization optional)
Ant.	9 dBi circular polarization antenna (9 dBi linear antenna optional)
RF Power	0 - 30dBm
Read Distance *	0-5m * Effective distance depends on antenna, tag and environment.
Write Distance *	0-2m * Effective distance depends on antenna, tag and environment.
Read Rate	20cnt / second
Read Type	ISO18000-6C（EPC Gen2）
Reading Prompt	Buzzer
Working Voltage	DC +9 - 24V, 12W
Work Mode	Active mode, Answer mode, Trigger mod, Password mode
Communication	RS232, RS485, WG26, WG34, Trigger, Relay(Optional), RJ45(Optional), WIFI(Optional), POE(Optional),USB(Optional)

Net	RJ45 support TCP Client/Server, Modbus, DNS, DHCP. WIFI support TCP Client. 4G support TCP Client. HTTP Protocol(Optional), MQTT(Optional), LLRP(Optional)
SDK	
SDK	Support X86 & X64, C++, C#, VB, Delphi, Linux, ARM, Python, NodeJS, QT, JAVA, Android.

Interface

Item	Comment
Red	VCC (DC 9V – 24V)
Black	GND
White	RS232 TXD
Purple	RS232 RXD
Brown	GND
Yellow	Wiegand DATA0
Green	Wiegand DATA1
Gray	GND
Pink	RS485 A+
Orange	RS485 B-
Aqua	Trigger input+ （TTL level）
Blue	Trigger input- （TTL level）