UHF Desktop Reader Instruction

HYR810

Winnix Technologies Co.,Limited

Brief Introduction

- UHF RFID high performance desktop reader embedded with modulewhich designed by using Impinj INDY chip, maximum power supply is 25dBm. 15dBm is recommended as fixed power
- USB interface is available for power supply and communication, which reaches the most simply connection
- With internal 0 dBi circular polarization antenna, tag reading distance is adjustable from 0 to 1 meter.
- High read rate up to 200 tag/s
- Two GPIO connect to LED light and buzzer, clients can easily control IO according to the special requirement
- Good writing performance, well suitable as desktop reader or identifying device for high performance industrial application.

Technical Data

No	Item	Technical Data	Unit	Remark
1	Fixed current	380	mA	USB Power supply @ 15dBm
2	Standby current	≤100	mA	Connect by USB
3	Frequency range	840～960	MHz	
4	Default working frequency	Frequency hopping	MHz	Frequency interval 250KHz
5	Channel bandwidth	250	KHz	
6	Frequency hopping speed	≤2	s	
7	Fixed power	15	dBm	Recommended Value
8	Stepping interval	1	dB	5~25dBm, adjustable by software
9	Label protocol	EPC C1G2 /ISO18000-6C		
10	Communication Protocol	Asynchronous serial ports		

11	Starting time	≤50	ms	
12	Radio-frequency rising time	≤500	μs	
13	Radio-frequency dropping time	≤500	μs	
14	Adjacent channel power leaking ratio	≤-40	dB	±1CH
		≤-60	dB	±2CH
15	Frequency stabilizing ratio	±10	ppm	-25℃～+40℃
		±20	ppm	-40℃～+60℃
16	Max reading range	1	m	Internal 0 dBi antenna
17	Reading tags' rate	>200/s		

Appearance and Structure

- Dimension(Length X Width X Height)：129×80×22mm
- Weight：180g

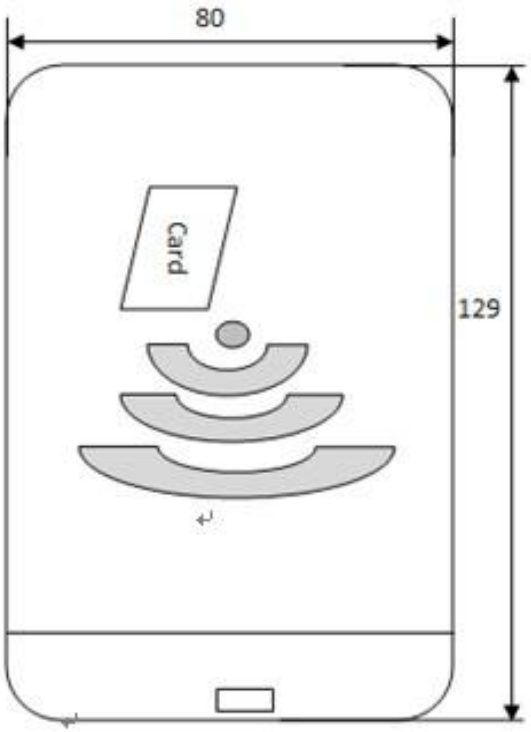

Fig 1 Front view of the desktop reader

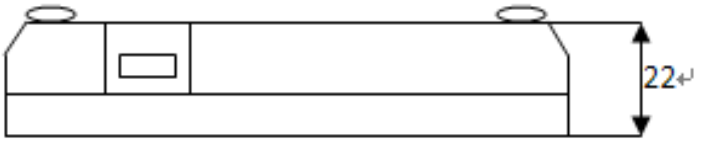

Fig 2 Side view of the desktop reader

Interface Definition

Pin	Signal name	Signal Direction	Function/compatibility description	Remark
1	VCC	Input	USB supply	
2	GND	Input	USB supply	
3	USB_D+	Bi-direction	USB connect computer	
4	USB_D-	Bi-direction	USB connect computer	
5	GPIO1	Bi-direction	Connect LED, Red	Computer control
6	GPIO2	Bi-direction	Connect to buzzer	Computer control

Environment Requirement

No	Item	Technical data	Unit	Remark
1	Working temp.	-20～+70	℃	
2	Storage temp.	-40～+85	℃	
3	Relative humidity	5%～95%	RH	Non-condensation

Certification

FCC ID: RVZHYR830

CE: ETSI EN 301, ETSI EN 302, EN 50364, EN60950