

UHF Desktop Reader Instruction

HYR820

(V2.0)



Winnix Technologies Co., Limited

Brief Introduction

HYR820 is a USB UHF desktop reader, it's small, ultrathin, portable, can widely be used in logistic, ID, parking, access control, anti-fake system and manufacturer process control etc

Features

- Advanced tag Collision processing algorithm, high reading speed.
- Working mode: FHSS or fixed frequency
- Output power: maximum 25dBm (15~25dBm adjustable by soft)
- Low power consumption, USB power supply;
- Support response (interactive) working mode and active mode;
- The output format and parameters can be configured in the active working mode
- Support USB interface ;
- Provide DLL, support second development
- Reading hint: Buzzer, LED
- Reading distance: 0.4m wit 0dbi antenna
- maximum identifying speed can reach 40/s

Technical Data

No	Item	Technical data	Unit	Remark
1	Max current	380	mA	25dBm with USB power supply
2	Standby current	≤50	mA	
3	Frequency range	865~868 920~925	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	25	dBm	
8	Stepping interval	1	dB	15~25dBm, adjustable by software
9	Label protocol	EPC C1G2 /ISO18000-6C		
10	Communication protocol	Asynchronous serial ports protocol		
11	Starting time	≤50	ms	
12	Radio-frequency power rising time	≤500	μs	
13	Radio-frequency power 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	0.4	m	With 0 dbi antenna
17	Multi-tags	>40/s		

Appearance and Structure

- Dimension(Length X Width X Height): 129×80×22mm
- Weight: 50g

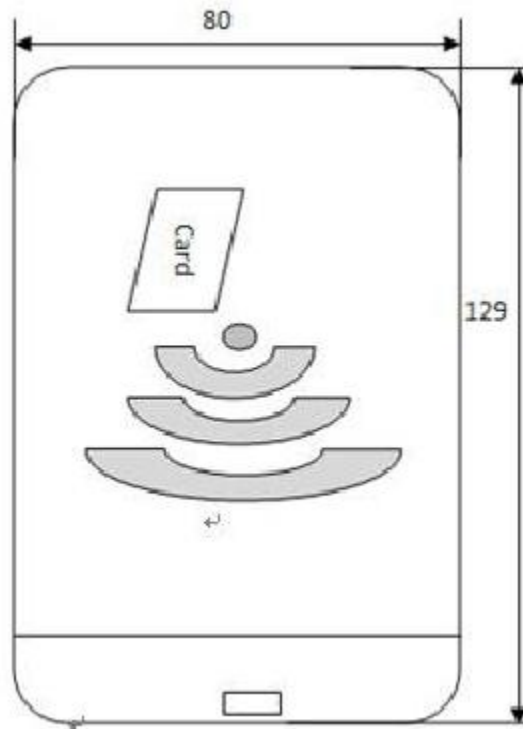


Fig 1 Front view of the desktop reader

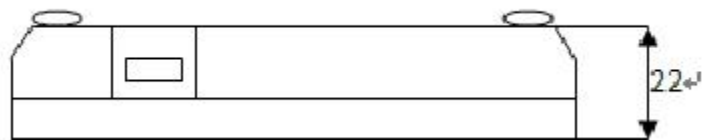


Fig 2 Side view of the desktop reader

USB Interface Definition

Pin	Signal name	Signal direction	Function/compatibility description	Remark
1	VCC	INPUT	USB power supply	
2	USB_D-	Bi-direction	USB signal line	
3	USB_D+	Bi-direction	USB signal line	
4	GND	INPUT	USB power supply	

Environment Requirement

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