

UHF RFID 4 Ports Reader
HYR831



Winnix Technologies Co., Limited

Brief introduction

- UHF RFID Reader uses R2000 chips, It max power output is 31dBm
- RP TNC ports, with an 8dbi circular polarized antenna, reading distance can reach up to 15 meters
- maximum identifying speed can reach up to 400 tags/sec
- 8 LED lights, real-time display working status
- Many external ports, Including RJ45 interface, RS232, GPIO_IN*4, GPIO_OUT*4, WIFI, can meet different client's requirement
- Excellent read and write performance, it is suitable for complicated environment application, for example logistics, clothing, asset management etc

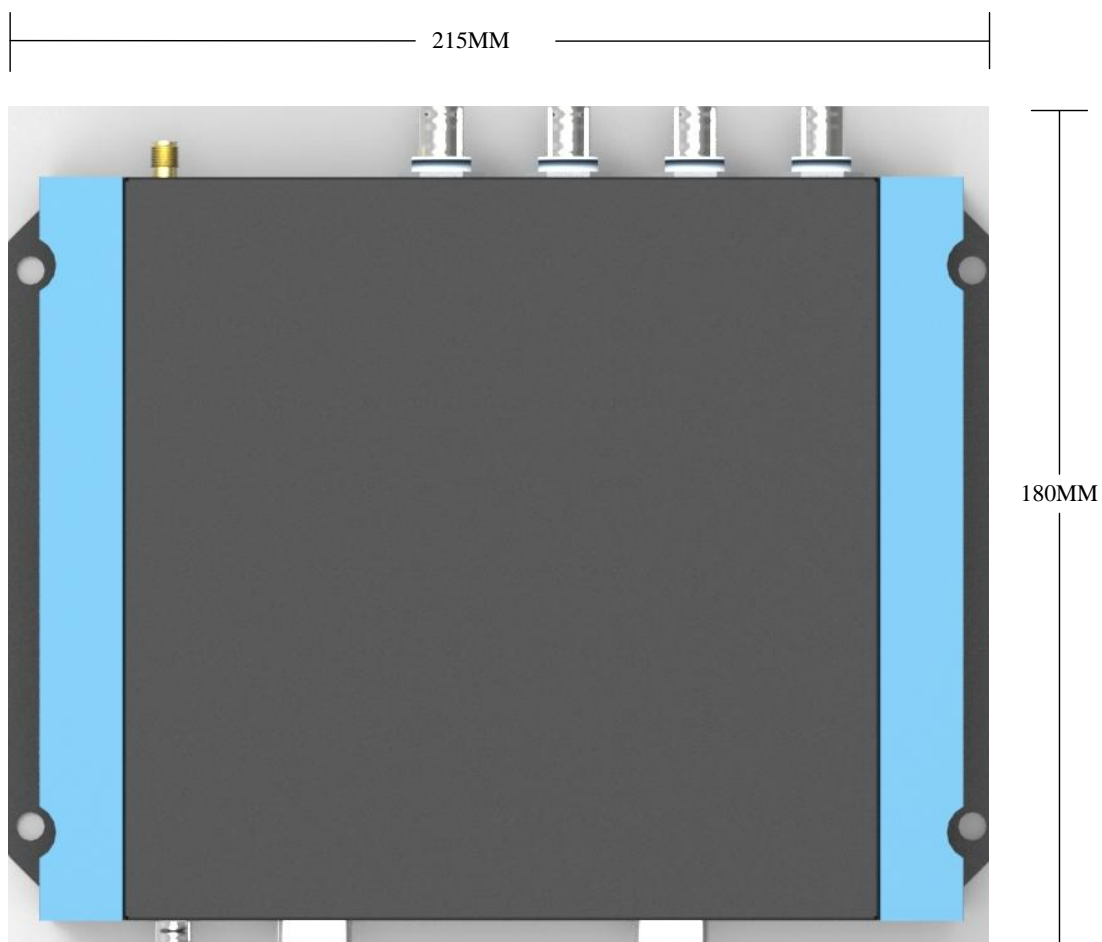
Technical data

No	Item	Technical data	Unit	Remark
1	Working voltage	12	V	
2	Working current	800	mA	
3	Standby current	≤100	mA	
4	Frequency range	840-960	MHz	
5	Default working frequency	Frequency hopping	MHz	Frequency interval 250KHz
6	Channel bandwidth	250	KHz	
7	Frequency hopping speed	≤2	s	
8	Max Tx power	30	dBm	
9	Stepping interval	1	dB	5~30dBm, adjustable by software
10	Tag protocol	EPC C1G2 /ISO18000-6C		
11	Radio-frequency power rising time	≤500	μs	
12	Radio-frequency power	≤500	μs	

	dropping time			
13	Adjacent channel power leaking ratio	≤ -40	dB	$\pm 1\text{CH}$
		≤ -60	dB	$\pm 2\text{CH}$
14	Frequency stablizing ratio	± 10	ppm	$-25^{\circ}\text{C} \sim +40^{\circ}\text{C}$
		± 20	ppm	$-40^{\circ}\text{C} \sim +60^{\circ}\text{C}$
15	Max reading range	15	m	8dBi Antenna
16	Muti-tags	$>400/\text{s}$		

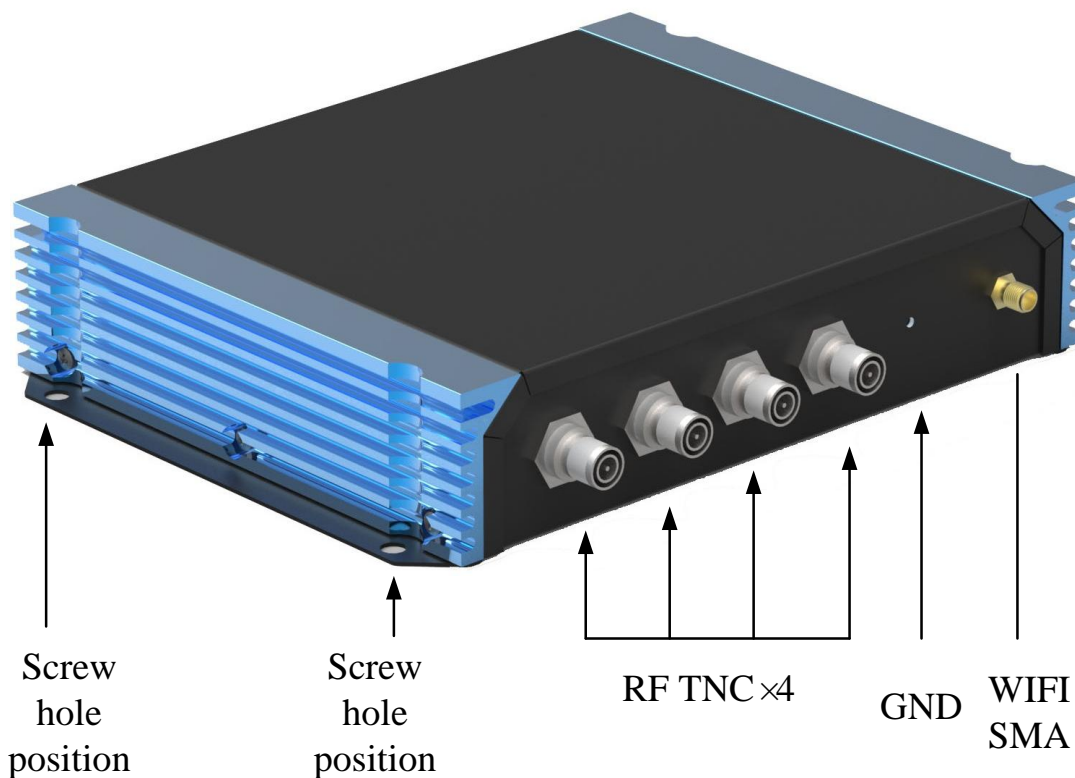
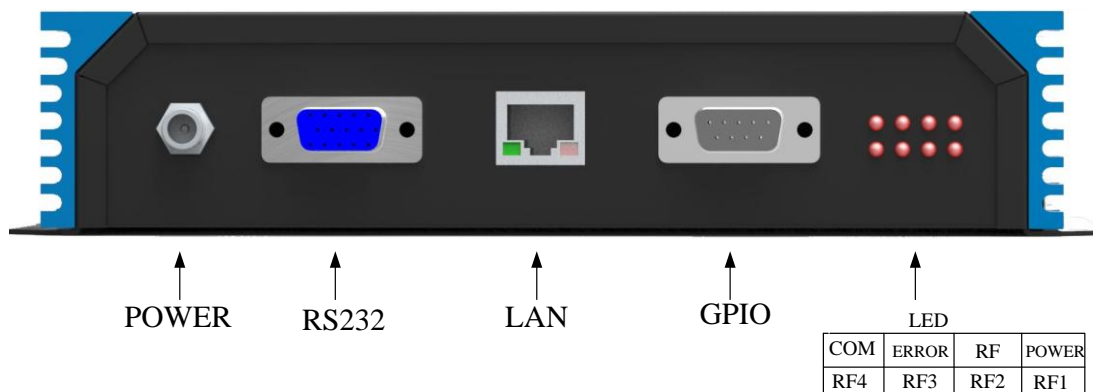
Appearance and structure

- Size: 190*145*30mm
- weight: 1280g



Drawing 1 Front view of the reader

External Interface



DB15 Interface define

No	Item	Technical data	Unit	Remark
Pin	Signal name	Signal direction	Function/compatibility description	
1	GPIO2	Output		optical coupler isolation
2	GPIO3	Output		optical coupler isolation
3	GPIO8	Input		optical coupler

				isolation
4	GPIO6	Input		optical coupler isolation
5	NC			
6	NC			
7	GPIO1	Output		optical coupler isolation
8	GPIO4	Output		optical coupler isolation
9	GPIO5	Input		optical coupler isolation
10	NC	Output		
11	NC			
12	GPIO7	Output		optical coupler isolation
13	NC			
14	NC			
15	GND			

Environment requirement

No	Item	Technical data	Unit	Remark
1	Working temperature	-20~+70	°C	
2	Storage temperature	-40~+85	°C	
3	Relative humidity	5%~95%	RH	non-condensing