

RGR21

8dBi RFID Panel Antenna





ELECTRICAL DATA			
Frequency Range (MHz)	860-868 MHZ		
Polarization Type	Vertical		
Gain (dBi)	8		
Horizontal 3dB Beamwidth (°)	65°		
Vertical 3dB Beamwidth (°)	70°		
VSWR	≤1.3		
Front-to-back Ratio	≥15dB		
Input Impedance (Ω)	50		
Max power per input (W)	20		
Lightning protection	DC Ground		
MECHANICAL DATA			
Connector Type	IPEX		
Height * width * depth (mm)	Ф306~306		
Cable Type	RG178		
Cable length (cm)	25		
Operating temperature (°C)	-40~60		
Mounting Pole Diameter (mm)	Ф30~60		



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8dBi RFID Reader (integrated antenna)

INTERFACE DEFINITION LIST		
PIN	INTERFACE	DESCRIPTION
1	+ 12V	12V Power supply
2	GND	Common ground with +12V external power
3	RS-232 TXD	RS-232 data output (optional)
4	RS-232 RXD	RS-232 data input (optional)
5	GND	Common ground with RS-232 interface (optional)
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6	GIPO3	GPIO3 or Wiegand Data 0 (optional)
7 8	GIPO4 GND	GPIO4 or Wiegand Data 1 (optional) Common ground with Wiegand data 0 (optional)
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	SPECIFICATIONS	UHF RFID IP Module
	Phychip PR9200 Inside	PR9200 has an outstanding performance with a low cost.
	Excellent Performance of Reading Tags	 Identifying Tags sensitively and stably. 8dBi Circular Polarization Planar Antenna: >10m. (T100 tag) Performance of multi-tags identification: >50pcs. Read rate: >50pcs/s.
	Completely Solve the Problem of Heat	 Don't need any cooling devices. No heat during long-term continuous full load working at room temperature. Continuous Current <200mA @26 dBm Output (3.5V Power Supply). Peak pulse current <260mA @26 dBm Output (3.5V Power Supply).
	Excellent Stability	 24 hours X 365 days continuous working without Crash. Less influence by shell, electromagnetic environment, etc. Wide temperature design. Temperature Coefficient is very low.
	Excellent Consistency	 A model of design consistency. Every indicators are calibrated rigorously, ensure consistency.
	Simple and Efficient Interface	 Communication interface is compatible with our INDY R2000 series. Peripheral circuits are very simple, single power, don't need to connect Ta. capacitor externally (See figure 1: Circuit Design Reference).
	Supports Two Installation Methods	 Supports RF connector + FPC connector installation method. Supports Surface Mount Solder.
	Input Voltage	AC 220V (ops. 12V)
	Standby Mode Current	<80mA (EN High Level)
	Sleep Current	<100uA (EN Low Level)
	Operating Current	180mA @ 3.5V (26 dBm Output, 25°C) 110mA @ 3.5V (18 dBm Output, 25°C)
	Starting Time	<80mS
	Operating Temperature	- 20 °C - + 70 °C
	Stor age Temperature	- 20 °C - + 85 °C
	Operating Humidity	< 95% (+ 25 °C)
	Air Interface Protocol	EPCglobal UHF Class 1 Gen 2 / ISO 18000-6C
	Spectrum Range Supported Regions	UHF 866-868 MHz (EU) US, Canada and other regions following U.S. FCC Europe and other regions following ETSI EN 302 208 Mainland China/Japan/Korea/Malaysia/Taiwan
	Output Power	0-26 dBm
	Output Power Precision	+/- 1dB
	Output Power Flatness	+/- 0.2dB
	RF Connector	I-PEX
	Receive Sensitivity	<-70dBm
	Peak Inventory Speed	> 50 pcs/s
	Tag Buffer Size	200 pcs @ 96 bit EPC
	Tag RSSI	Supported
	Host Communication	TTL Uart port Wiegand 26 Wiegand 34
	GPIO	2 output 3.3V TTL Level (opt. 1 input)
	Baud Rate	115200 bps (Default and Recommended) 38400bps
	Cooling	Air cooling (Don't need external Heatsink).

