

Long-rang Integrated Reader

Data sheet

RAVIRAJ Technologies

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Product Description

Long-range UHF RFID Integrated Reader is a high-performance reader/writer designed for high challenging RFID application environment. It employs our high efficient module, 12dbi linear polarization antenna and integrates with interfaces of RS232, RS485 and Ethernet, which can realize a reading distance of 15m. It owns a superior multi-tags reading rate and can achieve a tag identification rate of 400tags/s or above.

Adopts ABS industrial plastic case. Waterproof, dustproof and excellent anti-interference capability make this reader meet the requirements of all-weather outdoor industrial application.

Product Advantage

1. Employed IMPINJ R2000 RF Chips, up to -82dbm receiving sensitivity and the highest performance in this field makes this module more suitable for harsh application environment.
2. High stability and reliability, 60*24 hours high temperature of workstation, can work stably and continuous.
3. Remarkable performance, can achieve a reading distance over 14m for single tag reading.
4. Remarkable performance in intensive tags reading, can attain a tags identification rate of 400tags/s.
5. Provide the most comprehensive functions SDK and ports, easy to integrate RFID software.
6. Adopted integrating RF chip, module performance is more stable, and more suitable for harsh application environment.
7. The use of carrier wave cancellation technology makes the tags reading more accurate and reading scope wider.
8. Enhanced noise suppression function for reliable data capturing.
9. High precision return signal strength (RSSI).
10. Excellent performance of anti-interference and lightning-proof design.
11. ABS industrial plastic case, rugged and durable.
12. Waterproof and dustproof of industrial design, IP65.

Product Electrical Parameters

NO.	Name	Parameters
1	Working Voltage	DC +12V
2	Working Temperature	-25 ~ +65°C
3	Working Humidity	95% (+25°C)
4	Storage Temperature	-40 ~ +80°C
5	Tag Protocol	EPCglobal UHF Class 1 Gen 2 / ISO 18000-6C
6	Working Frequency	840 ~ 960 MHz
7	Supporting Working Areas	China 1, China 2 US, Canada and other regions following U.S. FCC Europe and other regions following ETSI EN 302 208 with & without LBT regulations Japan ,
8	Output Power	Software adjustable, step interval 1.0dB, maximum
9	Output Power Flatness	±0.2dBm
10	Receiving Sensitivity	-82dBm
11	RF Port Standing Wave	1.5
12	Reading Distance	15m (relate to tags type, transmitted power and application environment)
13	Multi-tags Reading	400tags/s
14	Interface Communication Rate	115200bps
15	Working Temperature Detection	Support
16	Intensive Read/Write Mode DRM	Support
17	Antenna Connection Protection	Support
18	RSSI	Support
19	Antenna Type	12dbi linear polarization antenna
20	Communication Port	RS485、RS232 (DB-9) RJ45 (100M Ethernet port)
21	Buzzer	Yes
22	Enclosure	ABS industrial plastic case
23	Dimension	44.5*44.5*7.5CM
24	IP Grade	IP64

Interface definition

Pin NO.	Name	Description
1	485-A	RS485 A
2	485-B	RS485 B
3	GND	Ground
4	GND	Ground
5	E-6	Ethernet RJ45 PIN6
6	E-3	Ethernet RJ45 PIN3
7	+12 V	DC +12 Power supply
8	GND	Ground
9	E-1	Ethernet RJ45 PIN1
10	E-2	Ethernet RJ45 PIN2
11	232-RX	RS232 RX
12	232-TX	RX232 TX

Physical Dimension

