

UHF Four Port Reader

(Impinj E710 RFID module)



Model Number: ST-8504

General Descriptions

ST-8504 is high performance UHF Long range RFID Reader integrated with Impinj E710 module with excellent reading performance. The reading distance up to 10 meters. It supports fast tag read/write with high identification rate. The reader is widely used in RFID system such as logistics, vehicle access control, and anti-counterfeit and industrial production process control system.

Product Features

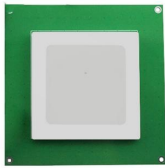
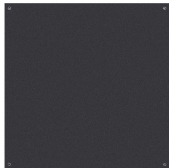
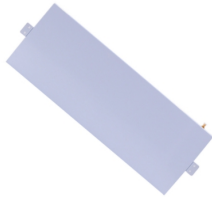
RF chip module	Impinj E710 chip
RF Power	33dbm(adjustable)
Fast card reading	Tag query speed up to 800 tags
Polling Inventory	Mufti-antenna port polling fast inventory
Communication Interface	Standard interface: USB、RS232、RS485、TCP/IP Optional interface: POE
GPIO communication	2 sets of GPI & 2 sets of GPO, can control external devices
Support multi-language development	Support C#, Delphi, java, Python, VB
Support firmware remote online upgrade	Special functional requirements can be completed through remote upgrades
With LED indicator	Check Reader working Status

Technical Specifications

Frequency standard	902~928MHz (US) 865~868MHz (EU)
Protocol standard	ISO18000-6C (EPC GEN2)
RF power	33dbm (adjustable)
Maximum query speed	800 tags/sec
Reading distance	0~25M (Depends on external antenna and tag)
Data cache size	600pcs @ max 128bits EPC or 180pcs @ max 496bits EPC
Mixed query	Support simultaneous query of EPC+TID area data
Operating mode	answer mode real-time query mode trigger mode (optional)
Judgment distance	Support output RSSI value
Voltage	12V 2A
Current consumption	0.5~1.2A
Communication Interface	standard interface: USB、RS232、RS485、TCP/IP Optional interface: POE, WIFI
GPIO interface	2 sets of trigger signal input 2 sets of relay signal output
Antenna port	4 RP TNC female connectors (TNC reverse female connectors)
Equipment size	184*161.7*26mm
equipment weight	0.6kg
Individual package size	200*255*100mm
Individual package weight	1.3kg
Operating temperature	-10~+60℃
Storage temperature	-20~+75℃

Interface definition

➤ Antenna interface: 4 RP TNC female connectors (4 different types of antennas can be connected externally at the same time)

	
ceramic antenna	near field antenna
	
cabinet antenna	Panel antenna

- **Standard interface: USB、RS232、RS485、TCP/IP**

- **Optional interface: POE、WIFI**

		
TCP/IP Stable network communication, wireless length limit	POE Network cable power supply, no wiring required, plug and play	WiFi Wireless communication, no wiring required

Wiring definition

DC power supply		
serial number	Signal	content
1	PWR	+12V DC
2	CND	grounding

RS232 D89 female head		
serial number	Signal	content
1	NC	reserve
2	RXD	RS232 data input
3	TXD	RS232 data output
4	NC	reserve
5	GND	grounding
6	NC	reserve
7	NC	reserve
8	NC	reserve
9	NC	reserve

GPIO		
serial number	Signal	content
1	COM1	Relay 1-Common
2	NO1	Relay 1 - normally open
3	COM2	Relay 2-Common
4	NO2	Relay 2 - normally open
5	CND	grounding
6	GPI-1	trigger 1
7	GPI-2	trigger 2
8	CND	grounding
9	A+	RS485 data 1 (D+)
10	B+	RS485 data 0 (D-)

Product accessories: power adapter + plug * 1 set, serial line * 1 USB line * 1



Fixed series of products

ST-8504 Four-channel Reading distance 0-25 meters E710 chip solution Antenna port RP TNC female	ST-8508 Eight channels Reading distance 0-25 meters E710 chip solution Antenna port SMA female

Application

