



RFID-RDT-H9291TDB

### **HF Long Distance Reader ISO15693**



HF Fix Reader

Model: FIX-9291TDB

Size : 210x160x68 mm

Weight: 2380g

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#### **GENERAL DESCRIPTION**

HF long distance reader 9291TDB is a high performance tag reader. It is designed upon. fully self-intellectual property. Based on proprietary efficient anti-collision algorithm, it supports fast tag. read/write operation with high identification rate. It can be widely applied in many RFID application systems such as Logistics, Personnel Identification, Conference Attendance System, Access Control, Anti-counterfeit, Industrial Production Process Control System, etc.

#### **FEATURES**

- Self-intellectual property;
- Support ISO/IEC15693, ISO18000-3 protocol tag;
- RF output power 0.25W~8W (software adjustable);
- Advanced anti-collision algorithm, high identification rate, typical tag processing speed is over 80 tags/s;
- SMA RF interface to support standard 50ohm RFID antenna. Effective distance up to 100cm\*;
- Support Scan-mode<sup>1</sup>;
- Support EAS scan mode;
- Support external input and command synchronization in scan mode;
- Support Transparent Command operation<sup>2</sup>;
- Support DPPM/WPPM tag-parsing mode<sup>3</sup> and maximize improving processing speed;
- Support antenna failure detection;
- Support RS232 interface, provide RJ45(TCP/IP) and WiFi for choice;
- Baud rate is adjustable;
- Low power dissipation with single +24V DC needed;
- Provide DLL and Demonstration Software Source code to facilitate further development.



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①Scan-mode: It refers to reader's automatic working mode.

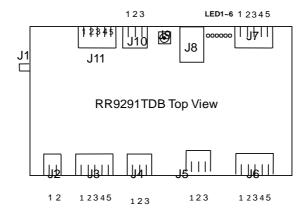
② Transparent Command Operation: It is an advanced feature designed to support tag's future functions and different chip venders customized tag functions.

③ DPPMWPPM Tag-parsing Mode: DPPM tag-parsing mode means depth-first parsing pattern and WPPM means breadth-first parsing pattern. They are different methods of decoding multiple tags.



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#### INTERFACE DESCRIPTION





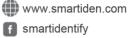
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No.	SYMBOL	COMMENT			
J1	J1	RFID antenna socket			
J2	J2-1	+24V DC positive terminal			
	J2-2	+24V DC negative terminal			
J3	J3-1	Reserved			
	J3-2	Reserved			
	J3-3	GND			
	J3-4	WCR: serial WiFi configuration data input			
	J3-5	WCT: serial WiFi configuration data output			
	J4-1	GND			
J4	J4-2	RXD: RS232 data input			
	J4-3	TXD : RS232 data output			
	J5-1	GND			
J5	J5-2	R- : RS485 data			
	J5-3	R+ : RS485 data			
	J3-1	RB- : RS422 data output			
	J3-2	RB+ RS422 data output			
J6	J3-3	GND			
	J3-4	RA- : RS422 data input			
	J3-5	RA+ : RS422 data output			
	J7-1	OC+ : general output1 (optical coupler insulated)			
	J7-2	OC-: general output1 (optical coupler insulated)			
J7	J7-3	IN+: general input (optical coupler insulated, it can be optionally pulled up to +24V)			
	J7-4	V- : +24V DC output ground terminal			
	J7-5	IN- : general input (optional coupler insulated)			
J8	J8	TCPIP RJ45 socket (RJ45) (optional)			
J9	J9	WiFi antenna socket			
	J10-1	Reserved			
J10	J10-2	OC-: general output2 (optical coupler insulated)			
	J10-3	OC+ : general output2 (optical coupler insulated)			
	J11-1	Relay common node			
	J11-2	Relay normal-close node			
J11	J11-3	Relay normal-open node			
	J11-4	V- : +24V DC output ground terminal			
	J11-5	V+: +24V DC output positive terminal			
	LED1	Red : TCPIP network indicator			
LED1~6	LED2	Green: TCPIP network indicator			
	LED3	Orange: serial data output			
	LED4	Green: serial data input indicator			
	LED5	Blue: reader command executing indicator			
	LED6	Red : RFID antenna failure indicator			
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### **CHARATERISTICS**

Absolute Maximum Rating

ITEM	SYMBOL	VALUE	UNIT
Power Supply	VCC	28	٧
Optical Coupled Input/Output	V <sub>OPC</sub>	30V / 30mA	
Operating Temp.	$T_OPR$	-20 ~ +65	$^{\circ}\mathrm{C}$
Storage Temp.	T <sub>STR</sub>	-25 ~ +80	°C

Electrical and Mechanical Specification
 Under T<sub>A</sub>=25°C, VCC=+24V and RF output power 4W unless specified.

ITEM		SYMBOL	MIN	TYP	MAX	UNIT
Power Supply		VCC	22	24	26	V
Current Dissipation		Ic		0.68	1.2	Α
Frequency		F <sub>REQ</sub>		13.56		MHz
Effective Distance*		DIS	0	900	1000	mm
Relay	Rated Load	$C_{LOAD}$			0.5A at 125VAC 1A at 24VDC	
	Operating Voltage				125VAC 60VDC	V
	Operating Current				1	А

<sup>\*</sup>Effective distance depends on RF output power, antenna, tag and working environment.



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