

***This UHF intelligent antenna multiplexer utilizes master and slave unit design and is an ideal choice for smart shelf, electronic label shelf and other RFID applications.***

This high performance UHF antenna multiplexer system is intended for networking and distributing UHF RFID antennae to enable real-time item level assets tracking and management. It is also an ideal choice for smart shelf, electronic label shelf and other RFID applications. This antenna multiplexer utilizes master and slave unit design and all information exchange between master and slave goes through RF cables so no extra communication cabling is needed.

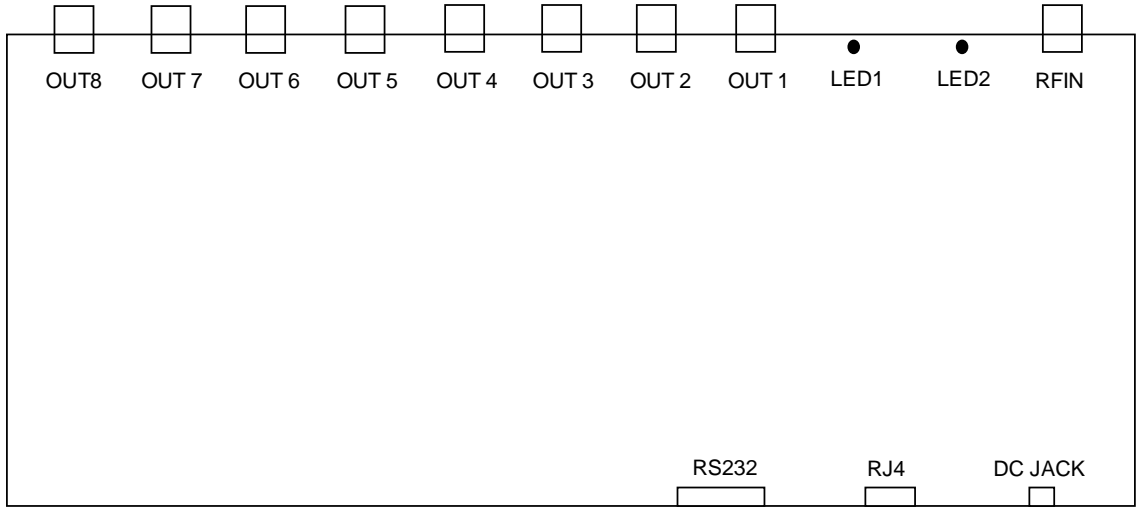
It utilizes a proprietary intelligent identification algorithm and can realize as many as 32 slave multiplexers and 256 antenna connections. It also provides real time antenna connection status.



### **Key Features**

- ✓ Operating frequency 860 to 960 MHz
- ✓ Master and slave unit design
- ✓ Master with 1 RF input connecting reader and 8 RF output ports
- ✓ Slave with 1 RF input connecting master, 1 RF output for cascading and 8 RF output for antennae
- ✓ Supports 4 level slave cascading
- ✓ Total 256 antennae supported
- ✓ Employs antenna scanning for its network topology
- ✓ Plug-and-play
- ✓ Low insertion loss
- ✓ Low power dissipation design with single +9 V DC supply
- ✓ RS232 and TCP/IP interfaces

**Master Interface**



**1. Power Supply DC JACK**

No.	Symbol	Comment
Central	PWR	+9V power supply
Outer	GND	Ground

**2. Serial Port RS232 (DB9 Female)**

No.	Symbol	Comment
1	NC	Reserved
2	TXD	RS232 serial data output
3	RXD	RS232 serial data input
4	NC	Reserved
5	GND	Ground
6	NC	Reserved
7	NC	Reserved
8	NC	Reserved
9	NC	Reserved

**3. TCP/IP (10M/100M) Socket RJ45**

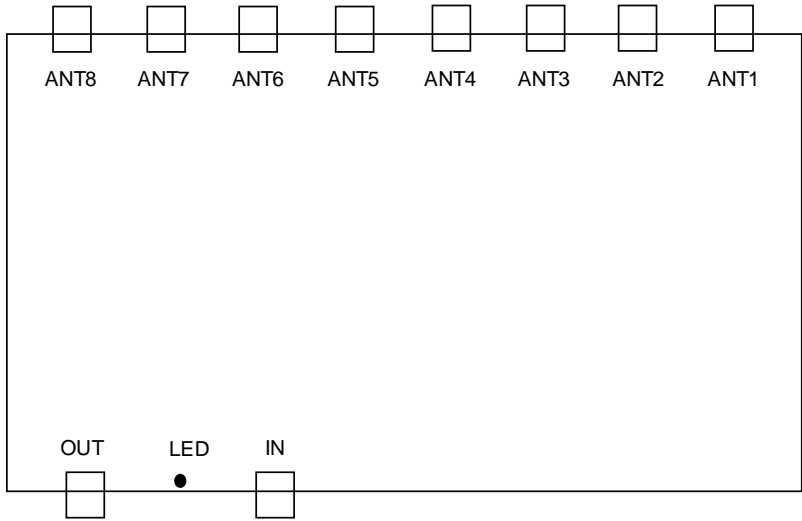
**4. MCX (Female) RF Output OUT1 to OUT8**

**5. SMA (Female) RF Input RFIN**

**6. Indicator**

No.	Symbol	Comment
1	LED1	Working indicator
2	LED2	Power on indicator

**Slave Interface**



**1. MCX RF Input IN**

**2. MCX RF Cascade Output OUT**

**3. MCX Antenna Port ANT1 to ANT8**

**4. Working Indicator LED**

## Characteristics

- Absolute Maximum Rating**

ITEM	SYMBOL	VALUE	UNIT
Power Supply	VCC	45	V
Operating Temp.	T <sub>OPR</sub>	-10 to 55	°C
Storage Temp.	T <sub>STR</sub>	-20 to 75	°C

- Electrical and Mechanical Specification**

**Under T<sub>A</sub> = 25 °C, VCC = +9 V unless specified**

ITEM	SYMBOL	MIN	TYP	MAX	UNIT
Power Supply	VCC	7	9	40	V
Current Dissipation	I <sub>c</sub>	170	200	300	mA
Frequency	FREQ	860		960	MHz
RF Output Power	P <sub>out</sub>			36	dBm

*\* Effective distance depends on protocol, tag and environment.*

## Technical Specifications

Size (mm)	200 x 105 x 28 (Master)
	125 x 59 x 17 (Slave)
Weight	500 g (Master)
	220 g (Slave)



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