

# ATC-863/871/873

#### **Product Features**

- Ultra low power transmission
- ISM frequency band, not requiring on application of frequency point
- High ani-interference and low BER (Bit error Rate)
- Long transmission distance
- Transparent data transmission
- Multi-channel and speed
- Low power consumption
- High speed wireless communication and large data buffer
- Intelligent data control and the user doesn't need to prepare excessive programs
- High reliability, small and light
- Watchdog monitor
- Antenna choose

### **Application**

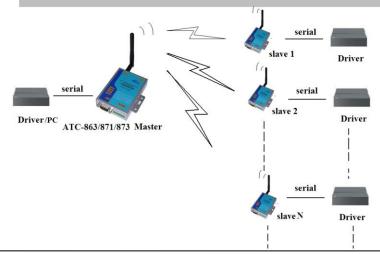
ATC-863/871/873 the Mini Power Wireless Module is used as the wireless data transmission in short distance. With the small size, weight and power consumption and good stability and reliability, it has the function of bi-directional data sign transmission, test and control. It is used for Wireless meter reading, such as water meter, electric meter and gas meter, parking meter, intellective card, electronic weighing apparatus, meter for checking on work attendance, queue wireless meter, building control, shipping company control, alarm system, intelligent equipment, Automatic data collecting system; Industrial remote control and remote test building automation, safety and security, powerhouse equipment wireless monitor, entrance control system, etc. It provides the USB power interface to be convenient for the mini computer and PC users if necessary.



### **Product Description**

ATC-863/871/873 wireless digital transmission module offers standard RS-232, RS-485 and UART/TTL level interfaces for direct connection with computers, use's RS-485 equipments, SCM or other UART parts.

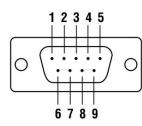
ATC-863/871/873 has adopted half duplex communication channel most suitable for point to multi-point communication mode. The primary station takes full control of communication harmony, and adopts data frames with address codes for data or command transmitting. The secondary station shall fully receive them and select response by comparing address codes; all the work shall be fulfilled by upper layer protocols, which shall ensure that only one wireless module in the communication network is in the transmitting state in any instant to avoid mutual interference. Therefore, the transmission channel built by ATC-863/871/873 is transparent to the user. ATC-863/871/873 can also be applied to point to point communication, making it easier and smoothly upgrade wire (RS232/485/TTL) transmission mode in original system.



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## **Pin Assignment**

RS-232 DB-9(Male)



## **Specifications**

PIN	RS-232	
1/4/6/7/8/9	-	
2	RXD(in)	
3	TXD(out)	
5	GND	

RS-485/422 6-pin Terminal block

1	2	3	4	5	6
485+	485-	NC	NC	VCC (9~24VDC)	GND

Technical Character	istics			
Modulation mode	FSK/GFSK			
Working frequency	433MHz/868MHz/915MHz			
Transmission power	ATC-863/871	100mW		
	ATC-873	500mW		
	ATC-863	-110dBm		
Receiving sensitivity	ATC-871	-121dBm		
	ATC-873	-123dBm		
Transmitting current	ATC-863/871	<360mA		
Transmitting current	ATC-873	<75mA		
	ATC-863	<11mA		
Receiving current	ATC-871	<30mA		
	ATC-873	<45mA		
Cleaning ourrent	ATC-863/871	<10uA		
Sleeping current	ATC-873	<1mA		
RF Baud Rate	ATC-863	1200/2400/4800/9600/19200bps		
RF Dauu Rale	ATC-871/873	1200/2400/4800/9600/19200/38400bps		
UART Baud Rate	ATC-863	1200/2400/4800/9600/19200bps		
UART Dauu Rale	ATC-871/873	1200/2400/4800/9600/19200/38400bps		
Change time for receiving and sending	<10ms			
Interface data format	8E1/8N1/8O1			
Power Supply	9-24V@200mA			
Physical Characteri	stics			
Installation		DIN-Rail Mounting		
Housing	Iron (1mm)			
Weight	0.6kg			
Dimensions	100 × 86 × 26 mm(3.94 × 3.39 × 1.02 in)			
Environmental Limit	ts			
Operating Temperature	-20 ~ 70°C (-4 ~ 158°F)			
Storage Temperature	-40 ~ 85°C (-40 ~ 185°F)			
Ambient Relative Humidity	5% to 95%(non-condensing)			

RoHS, CE, FCC

### **Order Information**

Model No	Description	Serial Type	Frequency	Distance
ATC-863	Mini Power Wireless Module	RS-232/485/TTL	433/868/915MHz	300meter
ATC-871	Mini Power Wireless Module	RS-232/485/TTL	433/868/915MHz	500meter
ATC-873	Mini Power Wireless Module	RS-232/485/TTL	433/868/915MHz	1000meter
ATC-875	Mini Power Wireless Module	RS-232/485/TTL	433/868/915MHz	2000meter

### **Contact us**

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