

# DTR900-FC Transceiver Module Spec

## 一、 SUMMARY

DTR900S-FC transceiver module adopt the most advanced Europe " bluetooth technology " at present , adopt the high-performance single IC radio frequency produced in digital scientific and technological , adopt high-efficient forward correct error by CRC , work steady and reliable while being at a high speed. Industry grades of standard, small and easy to install. Suitable for traffic, meteorological phenomena , environmental data are gathered, intellectual district, parking area vehicle managing, ammeter , watch meter, gas meter wireless read meter, ammeter , watch meter, gas meter wireless read meter etc.

## 二、 SPECIALITY

1. Miniature power: transmit power 10mW---2W.
2. ISM frequency, no need licence, carry frequency 430-438MHz, also provide 315/868/915MHz.
3. High anti-interference ability: adopt high-efficient forward correct error and check error by CRC, when the channel signal error code rates on the  $10^{-2}$  , can receive error code rates of actual mistake  $10^{-5}$ - $10^{-6}$  .
4. Transparent data transmission of half duplexing communication.
5. The wireless communication of high speed and big data buffering area.
6. It is flexible and convenient to set up: can set up RF frequency , series rate , product ID.
7. It is far to transmit the distance: the distance of reliably transmit (BER=10<sup>-3</sup>/1200bps), 300~2000m.
8. RS232/RS485/TTL UART interface.
9. Low consumption and sleep function :receiving current

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<20mA, transmitting current<40mA, sleep current<20uA (baud rate=1200bps)。

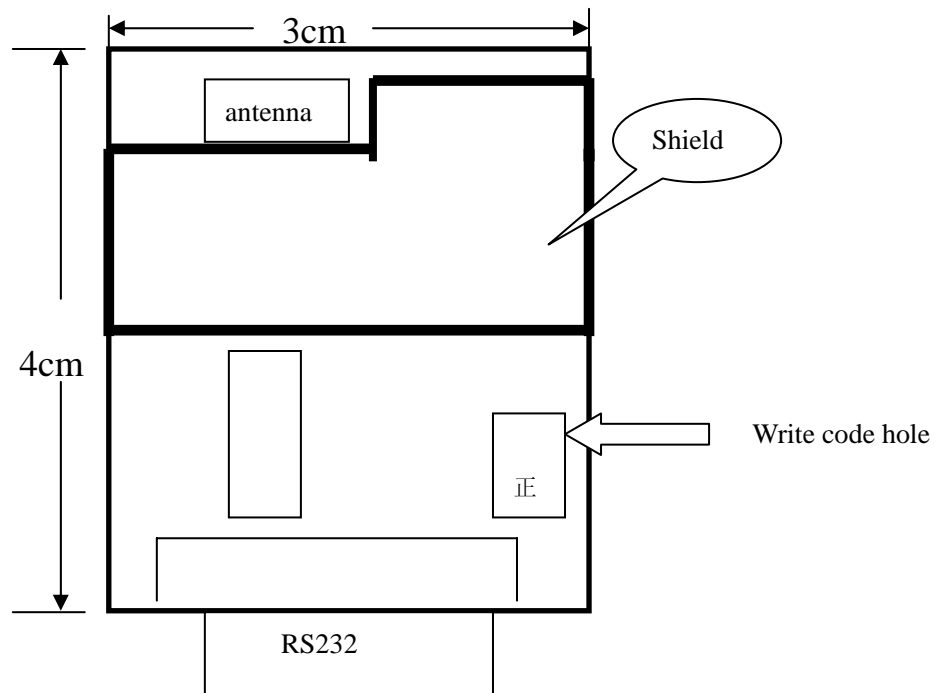
10. Can use DC power battery, also can take the lithium battery and to charge

12. High dependability, industry grades of standard, small, light

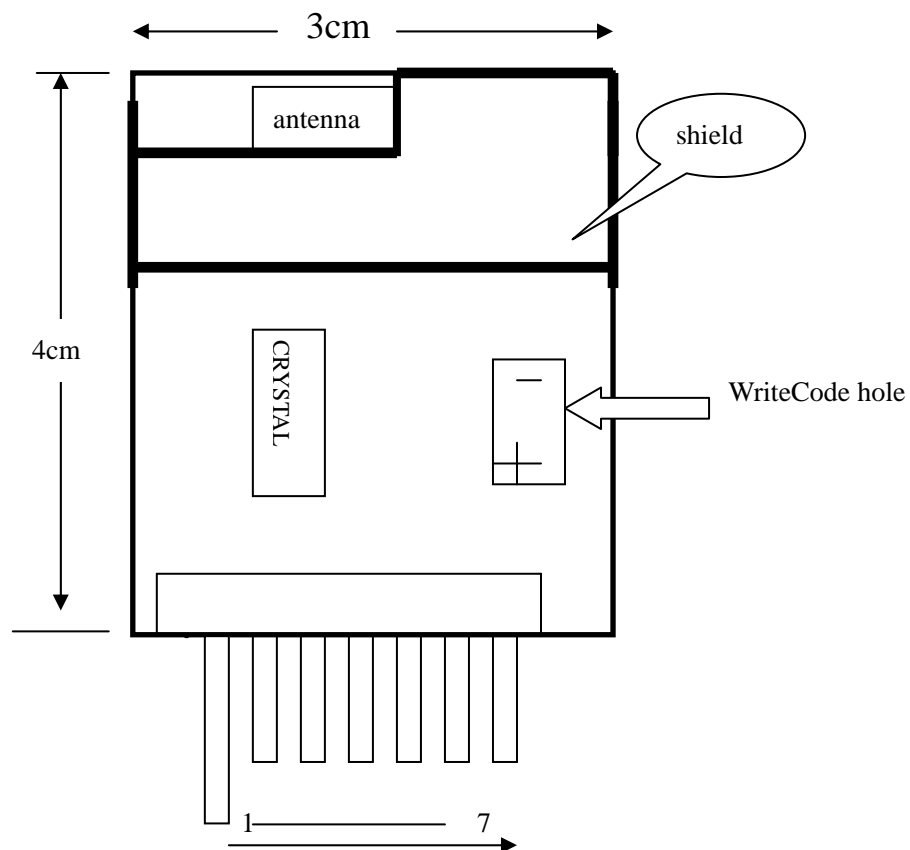
### 三、 Technical speciality

Parameter		value	unit
Frequency		430--438	MHz
Modulate Type		FSK	
Modulate Frequency Partially		±30	KHz
Bandwidth		100	KHz
Output Power		+10	dBm
Humorous		- 60	dB
Output Impedance		50	Ω
Sensitivity		-110	dbm
RF Rate		600-19200	bps
Series Rate		1200--19200	bps
current	receive	<18 (10mw)	mA
	transmit	<28 (10mw)	mA
Temperature		-40 -- +85	°C
Shape Size		3.0 X 4.0	cm*cm
Communication Distance		300 (10mw)	m

四、pin define



RS232 pin	name	function	
		TTL	485
1	VCC	dc power input (+4—10V)	
2	<b>D-OUT</b>	data output /485 A	
3	<b>D-IN</b>	data input/485 B	
5	<b>GND</b>	GND	
7	P_DOWN	Sleep switch (high:on, low:off)	
8	<b>CTS</b>	current control	
4,6,9	<b>NC</b>	NO USE	



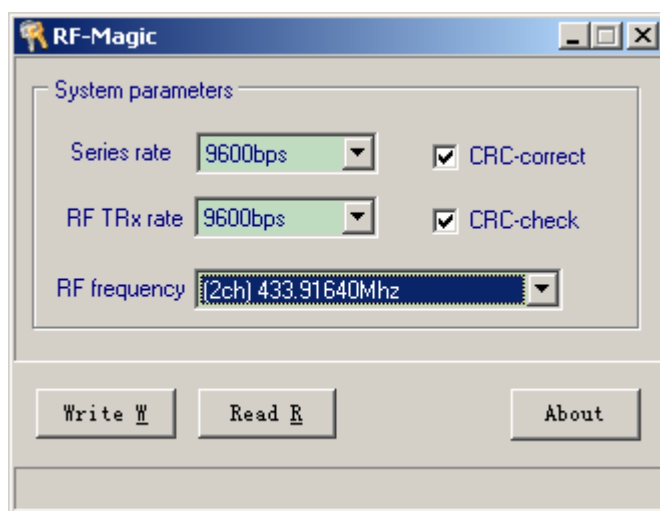
Pin	Name	Function	
		TTL	485
1	VCC	Dc power input (+3—8V)	
2	P-DOWN	Sleep switch(high:on, low:off)	
3	DIN-TX	Data input/485 B	
4	DOUT-RX	Data output/485 A	
5	CTS	Current control	
6	GND		
7	WR	No use	

## 五: WRITE PROGRAM INTRODUCTION

■ Write code of line connect computer series interface , write code of stitch end insert in the corresponding position of the module, the direction is as the fourth picture shows.

■ The module needn't add the power

■ Aattack the file of dtrwrite.exe ,open the program,the following of the interface,



## 六: Application

■ ammeter , watch meter, gas meter wireless read meter

■ fire control , safe defend

■ traffic , meteorological phenomena , environmental data are gathered

■ intellectual district, parking area vehicle managing

■ the controlling wirelessly of industrial automation and intelligence instrument .

■ logistics trail , the warehouse is patrolled and examined.

■ oil field、 gas field、 water conservancy、 mine data collect.

## 七, FCC STATEMENTS

- 1, Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
- 2, This device complies with Part 15 of the FCC Rules.
  - (1) This device may not cause harmful interference,
  - and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver. —Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

NOTE: THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

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