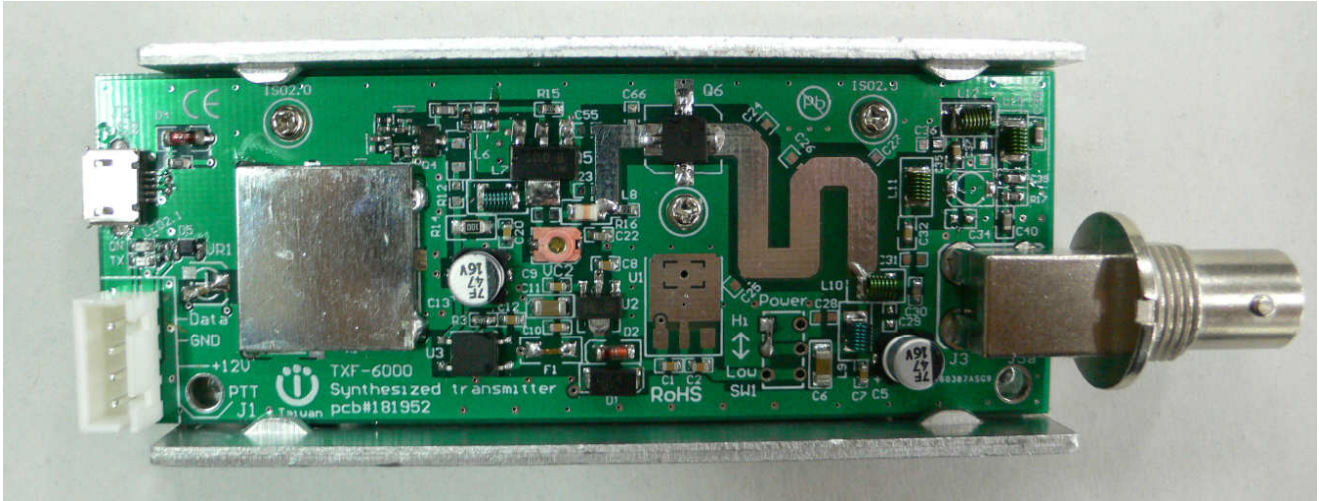




Technical Data

## Hi Power Data Transmitter Modules

VHF/UHF All Band Frequency Synthesized Transmitter



### Main Function

- FM/FSK Modulation
- 1 channel programmed frequency
- 1 POCSAG Encoder with message inside for option
- Frequency Stability <1ppm inside TCXO
- High power output up to 5W
- Wide operational frequency range
- Data rate from 300 bps up to 2.4K bps.
- Wide operation temperature from -30°C -- +70°C
- Small Size: 95mm X 35mm X17mm
- BNC or SMA jack on board
- SMA or BNC jack with cable for option

### Application

- Remote Controls
- Home and building automation
- Paging system
- Data linking system

## -Specification-

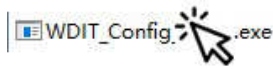
<b>Description</b>	<b>TX-6000</b>			
<b>Frequency Range</b>	136-192.MHz FCC Part Mask C.D.E ETSI 300 133.. 411-480MHz FCC Part 90 Mask D.E.G. ETSI EN 301 166.. 820-960MHz FCC Part 24, 15.247, 15.249... ETSI EN 300 220..			
<b>Frequency stability</b>	1 ppm Typ. at 25°C . Crystal by TCXO.			
<b>Channel spacing</b>	12.5Khz or 25Khz.			
<b>Data Rate</b>	From 512bps up to 2.4 Kbps. (deviation 4.5K).			
<b>Modulation</b>	Direct 2level FSK. Or audio FM.			
<b>Deviation</b>	Typ 5K Max			
<b>Spurious and Harmonics</b>	-60dBm.			
<b>POCSAG Encoder</b>	1 copcode 512/1200/2400bps Alphanumeric message			
<b>Harmonic distortion</b>	<2.5% maximum at 1200 bps.			
<b>RF Power output (Adjustable)</b>	1-5 Watt of <480MHz. 1-2W of 868 and 915 MHz.			
<b>Duty Cycle at 25°C by 12V</b>	100% at 1 W	70% at 2W	60% at 3 W	50% at 5 W
<b>Antenna Impedance</b>	50Ω			
<b>Transmitter attack time</b>	<2mS for within 1200 bps operation speed			
<b>RF Output Jack</b>	Standard. BNC or SMA Female on Board Option. SMA or BNC Female + 110mm RG174A/U cable			
<b>Power Supply</b>	DC 12V. (10V-13.8V).			
<b>Temperature</b>	-30°C — +70°C			
<b>Current Drain (Max)</b>	900mA			
<b>Module Size</b>	95mm X 35mm X 17mm			
<b>Weight. (with BNC Jack)</b>	40 grams.			

Meet the following international regulations

ETSI EN 301 166 for systems targeting  
 ETSI EN 300 113 maximum allowed output 410–480 MHz  
 ETSI EN 300 220 category 1 power in the respective  
 FCC PART 90 MASK D bands,  
 FCC PART 90 MASK E extender FCC PART 90 MASK G  
 ETSI EN 300 220 category 1 Performance also suitable  
 ETSI EN 301 166 for systems targeting ETSI EN 300 113 maximum allowed output 164–192 MHz  
 FCC PART 90 MASK C power in the respective FCC PART 90 MASK D bands  
 FCC PART 90 MASK E extender  
 ETSI EN 300 220 category 2 820–960 MHz FCC PART 15.247 FCC PART 15.249  
 410–480 MHz ETSI EN 300 220 category 2  
 164–192 MHz ETSI EN 300 220 category 2

## Tips to set up the programming parameters

1. Install the WDIT W1 programming AP execution file



2. Click and then run the programming software.

3. Connect the USB plug into the device and PC USB port.

Example Programming Screen as Below:

WDIT Config Tools V0.4

System Config

#	A	B	C	D	E
CapCode	Tone	Type	Message	ID	
01	1234567	D	Alphanumeric	Strongbox is open alarm !! .....	
02	1234568	D	Alphanumeric	B1 Fire case alarm !!.	
03		A	Alphanumeric	Address:3 MSG:3	
04		A	Alphanumeric	Address:4 MSG:4	
05		A	Alphanumeric	Address:5 MSG:5	
06		A	Alphanumeric	Address:6 MSG:6	
07		A	Alphanumeric	Address:7 MSG:7	
08	1234555	A	Alphanumeric	Transmitter A18 battery low !!	

Radio Type: 5L F Check

Freq: 457.5750 H MHz

Data Rate: 1200 J bps

Tx Power: 100% K dbm

L  Buzzer sound

M  TX LED

N  External Triger to active RF

P  Overlock second call within 10 seconds

Q  Battert low indicate

R  Send Battery low message 3 S

Low Battery AD value: 2AA T

	U	V	W	X
Key ID	Repeat Times	Stop Repeat Key	Repeat Interval	
Input A	Key 1	No	Input A	5 Sec
Input B	Key 2	1	No	1 Sec
Input C	Key 3	1	No	1 Sec
Input D	Key 4	Cycle	No	1 Sec

Y: Open Read Exit

Z: Save Write

Wireless.com.tw

1. #. Pager number: The Slot 01-08 column is Pager address, pager type, type of tones, and message.etc.
2. A. Capcode: 01-02 POCSAG address range 0000008-2097151 for POCSAG encoder option.
3. B. Tone A/B/C/D: For pager alert tone for POCSAG encoder option.
4. C. Type: For pager type selection, numeric or alphanumeric.
5. D. Message: Pre-programming the encoder messages for pager contents
6. E.ID: For the ID call system such as each specific nurse ID set-up.
7. **F. RF chip set select: Selected [25] for TXF-6K, then click [G] check and linking with RF chip set.**
8. H. Carrier Frequency set: Example 157.500,433.920 or 868.250...
9. J. Data Rate: POCSAG data speed and baud rate in 512bps or 1200bps or 2400bps types.
10. K.TX Power: RF output power set-up
11. L. Buzzer Sound: on/off the TXF-6K No use.
12. M. TX LED: On air LED indicated on/off.
13. **N. External data: Extra data input into this transmitter.(standalone Transmitter must turn √ )**
14. P. Over lock 10 Sec: Ignore same key press two and up it in 10Sec.
15. Q. Battery low indicate: Battery low indicated on/off.
16. R. Send battery low message: Send battery low message on/off.
17. S. Assigned Low Battery Alarm Message: When the battery low alarm, sending message by slot #01 or #08 select.
18. T. Battery low voltage set-up : Normal set [38F] by low to 2.4V alarm, if set [2AA] by low to 2V alarm.(more info call us)
19. U. Key ID: Normal Input A = Key1, The TXF-6K just use Input 1 only.
20. V. Repeater: Option with POCSAG encoder use, Each paging to be calling repeated times. 1-4 time or cycle for each press...
21. W. Stop repeater: TXF-6K no function in this item
22. X. Repeater intervals: Option with POCSAG encoder use, if select Cycle repeater how long by Sec sending again....
23. Y. Open: Open previous programmed own files.
24. Z. Save: Save programming files for buck up.
25. Read: Reading from own devices.
26. Write: Write to own devices.
27. *Exit : Exit the programming stage*

## I/O Connector and USB



Programming by  
**USD**  
Micro USB

### J1 Main I/O

Pin 1 Data (must check the data phase to meet receivers)

Pin 2 GND

Pin 3 DC 12V + (max 1A)

Pin 4 PTT Low for TX active



**Wireless Devices Inc. Taiwan**

8Fl.No.56 Lequn 3<sup>rd</sup> road Taipei.

[www.wireless.com.tw](http://www.wireless.com.tw)

