

# INSTRUCTION

## WP-67 IP67 Water-proof Radio

We are very grateful for your Choose our Anysecu two-way radios, We believe Anysecu two-way radio, which always incorporates the latest technology, can bring great convenience to your life and work.

We also believe that the quality and function of Anysecu two-way radio can meet your demands for reliable communication.

### ◆ Important Information

#### ■ Copyright

Anysecu authorized partners own the intellectual property of all the parts of this product (include accessories). Any design and materials may not be modified, copied, extracted or translated without the authorization of us or its authorized parities.

Due to the update or modification of the product, Anysecu owns the right to change the specifications of software and hardware described in this manual without further notice. Specifications and information contained in this manual are for reference only.

### ◆ Safety Information

#### Compliance with RF Exposure Standards

Your radio is designed and tested to comply with a number of national and international standards and guidelines (listed below) regarding human exposure to radio frequency electromagnetic energy. This radio complies with the IEEE and ICNIRP exposure limits for occupational/controlled RF exposure environment at operating duty factors of up to 50% transmitting. In terms of measuring RF energy for compliance with the IEEE and ICNIRP exposure limits, your radio radiates measurable RF energy only while it is transmitting (during talking), not when it is receiving (listening) or in standby mode.

Your radio complies with the following of RF energy exposure standards and guidelines

Institute of Electrical and Electronic Engineers (IEEE) C95.1-1992

Institute of Electrical and Electronic Engineers (IEEE) C95.1-1999 Edition

International Commission on Non-Ionizing Radiation Protection (ICNIRP) 1998

### ■ Operating Instructions to control RF Exposure

To decrease your exposure and ensure compliance with the occupational/controlled environment exposure limits, please always adhere to the following procedures.

1. Transmit no more than the rated duty factor of 50% of the time. To transmit, press the PTT button, and to receive the call, release the PTT button.
2. Keep your radio in a vertical position in front of the face with the microphone 5cm away from your mouth while transmit.

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3. When worn on your body, keep the antenna 2.5cm away from you body while transmit.
4. Do not transmit when the radio is not equipped with an antenna. Transmitting without an antenna may damage the product and result RF discomfort.

### ■ Using the designated accessories

Use the antenna, battery, adapter or charger supplied or sold by us only, or otherwise it causes damage to the product.

If you want to purchase or replace the accessories, please contact your local dealer.

### ■ Area restrictions

1. To avoid of the problems caused by electromagnetic interference or electromagnetic compatibility, turn off the radio in any facilities where posted notices instruct you to do so, such as hospital and other health care facilities. Turn off the radio when on board an aircraft, if instructed to do so.
2. In the vehicle with an air bag, do not place the radio in the area over an air bag or in the air bag deployment area.
3. Turn off the radio before entering any area with a potentially explosive atmosphere or blasting caps.
4. Do not operate the radio, disassemble or charge the battery in the potentially flammable and explosive atmosphere (such as gas station, coal gas station, etc.).
5. Do not place the radio under the direct sunlight or near the area with heating devices.
6. Do not place the radio in the area with great dust, moisture or drips, or on the unstable surface.

### ■ Operating Attentions

#### Antenna

Do not use any portable radio that has a damaged antenna. If a damaged antenna comes into contact with your skin, a minor burn can result.

#### Maintenance

Do not disassemble the radio by yourself. This product can only be maintained by the professional technicians.

Contact us or your local dealer for help if you want to re-develop or modify the radio.

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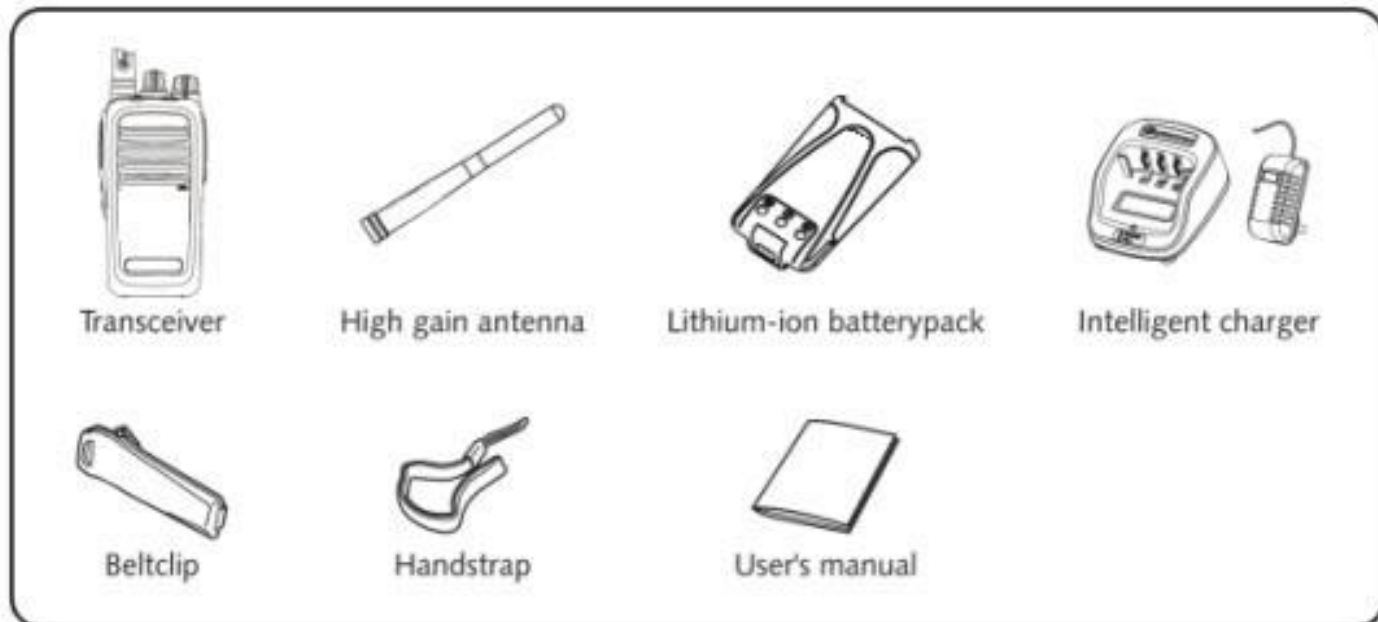
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## ■ Product check

Welcome to use ANYSECU wireless digital two-way radio WP-67. Before use, it is suggested that you should:

1. First check whether the packing box of this product shows sign of damage;
2. Open the packing box carefully and confirm if it contains items listed in the table below; Please contact the dealer immediately if you find this product or any accessory is lost or damaged during handling.

List of accessories



## ■ Battery information

- Use the battery for the first time

Please charge the new battery before use since it wasn't fully charged when delivery. Generally, when the battery is used for the first time, it shall be charged for **4 hours**. For lithium ion battery, no matter it is charged with slow charger or rapid charger, the charging time above shall be followed. It is suggested that the charging method above shall be followed when the new battery is charged **for first three times**. When the battery runs low, it shall be charged.

- Suitable type of battery

Please charge the battery specified by ANYSECU; an explosion may occur to cause personal injury if other batteries are used.

- Safety considerations in use of battery

1. Don't bring battery contacts or poles into contact with metal objects (including coin, key, jewelry or other conductive metal), otherwise, short circuit, discharging, heating or leakage may occur to cause item damage or personal injury. Therefore, care must be exercised for battery disposal.
2. Don't cause short circuit of battery terminals or discard the battery into fire. Don't disassemble the shell of the battery pack by yourself. Please put the discarded battery into dedicated battery recycling bins.

- Instructions of normal operation of battery

★ Please charge the battery indoors and best charging effect shall be attained at room temperature.

★ In general, the battery is fully charged when the indicator of the charger turns from red light to green light. Now, the battery shall be taken out.

★ The battery may be charged on the two-way radio, but preferably the two-way radio shall be turned off when charging to ensure that the

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battery is fully charged.

- ★ Don't charge the battery when its power hasn't been exhausted as this will shorten the service life of the battery (When the power is exhausted, the two-way radio will send out voice warning).
- ★ Don't place the battery fully charged back to the charger for "recharging" since this operation will significantly reduce the cycle service life of the battery.
- Extend the service life of the battery
- ★ Battery performance will decrease at temperature below  $-20^{\circ}\text{C}$ . Please prepare spare battery in cold weather. Don't discard cooled batteries which fail to work. They may work at room temperature.
- ★ Dust deposited on battery contacts may affect the service life of the battery. Please wipe the contacts with a clean dry cloth before the battery is loaded on the two-way radio.
- Battery storage notes
  1. Since battery self-discharge may occur, if the battery will not be used for a long time, please fully charge it before storage to avoid damage to the battery due to over-discharge.
  2. Please take out the battery from storage and recharge it 6 months after it is put into storage to avoid that over-discharge of electrolyte affect battery capacity.
  3. Attention shall be paid to the temperature and humidity in battery storage environment. Please store the battery in cool and dry conditions at room temperature to reduce battery self-discharge.
- Instructions of charging process of the charger

If the red indicator of the two-way radio flashes after the battery is loaded and prompts "low battery" every 30 seconds, please charge the battery.

Please charge the battery with ANYSECU specified charger; the indicator of the charger indicates the charging condition.

Display of the indicator	State
Red light flashes	Low battery voltage
Red light is on	In charging process
Green light is on	Charging completed

- Charging shall be done as follows:



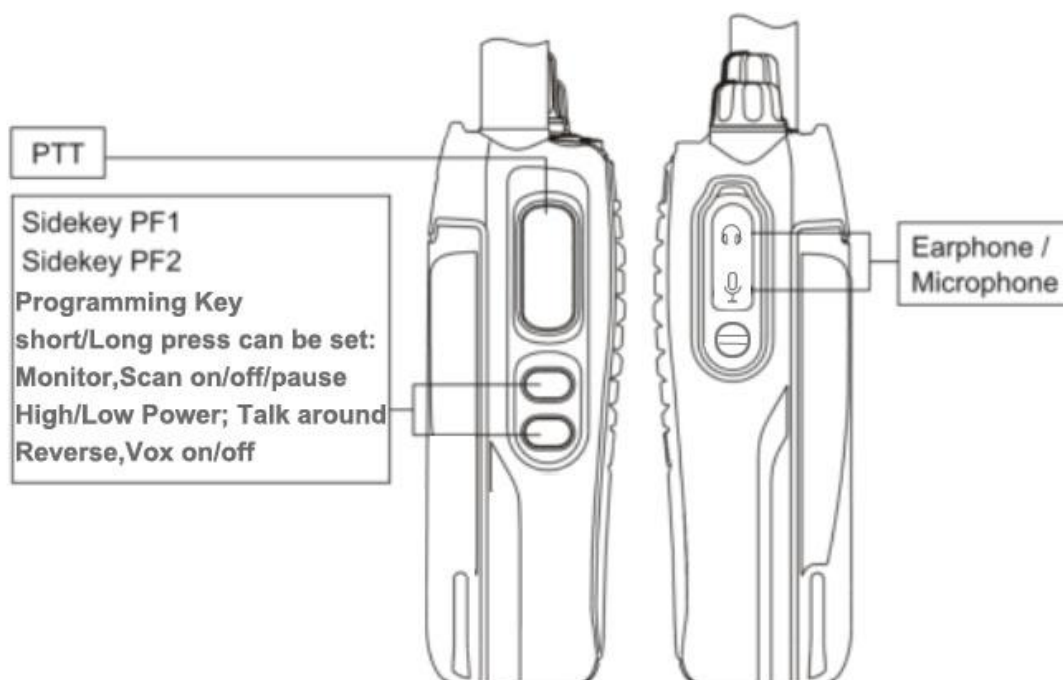
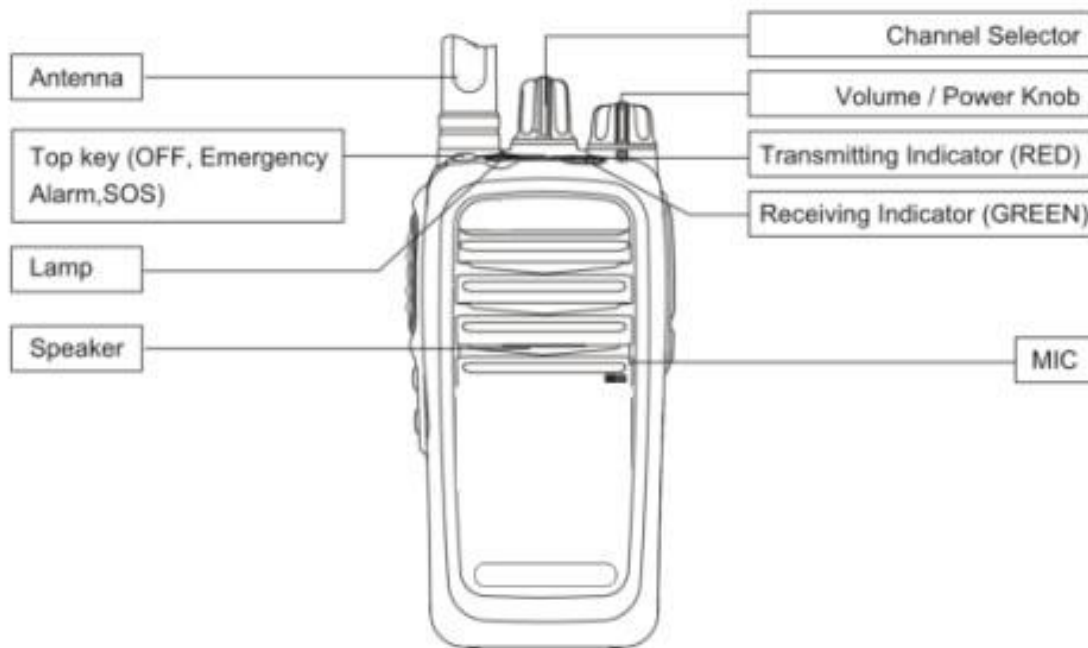
1. Insert the power cord into power adapter;
2. Insert the DC plug on the power adaptor into the DC jack on the back of the charger;
3. Insert the battery or the two-way radio with battery on the charger;
4. Insert the AC plug of the power adaptor on the output socket of AC power supply.

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5. Confirm that the battery is brought into contact with the charge terminal. When the indicator turns red, charging begins.
6. After the battery being charged for about 4 hours, the indicator turns green, representing that the charging is completed. Now, the battery or the two-way radio with the battery can be taken out.

Note: Make sure that this product is turned off during charging. The red light may flash continuously when the battery is put into the charger. This is the pre-charge process of the charger for protecting the battery when the battery power is low. It is a normal phenomenon which usually lasts for 30 seconds. Then the red light is on and the battery enters into normal charging state.

■Have an intimate knowledge of this two-way radio (illustration)



PS.: in emergency situation, press PF1 & PF2 start emergency alarm.

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## ■Basic operations

### ◆Monitoring function

In standby mode, press [MONI] key to start monitoring. When squelch circuit is shut off, you will hear the background noise (the prompt tone sounds once); release the same key to stop monitoring, then you will not hear the background noise.



If it is needed to check whether channel interference exists, you can press this key and rotate the volume control knob, then you will hear the background noise or interference noise.

### ■Scanning function

Your two-way radio finds out whether there is voice activity in current channel/contacts group by scanning the channel/contacts group sequence in the list. Your two-way radio can support up to 16 scanning list. You can add or delete channels by editing the scanning lists with frequency writing software.

### ◆Start and stop scanning

Execute the operation steps below:

1) Start scanning by pressing [\*SCAN] key.

·or: When scanning, your two-way radio stops in the channel/contacts group where activity is detected. The two-way radio stops in the channel for the preset time which is called "idle time", indicator keeping green. You can press the [PTT] key and then speak to the microphone clearly.

2) If you fail to make a response within the idle time, the two-way radio shall go back and scan other channels/contacts groups.

3) You can stop the scanning by pressing [\*SCAN] key during scanning.

### ◆Scan temporary delete

1)When start Scan temporary delete,the set to [\*Scan temporary delete] channel will not be scanned

2)If want to restart scan, pressing [\*Scan temporary delete] key.

### ◆Power setting

Select power (HIGH/LOW) by pressing [\*High/Low power switch] key.

### ◆Talk around

When using the talk around, the frequency of the interphone becomes the same of the receiving frequency; the transmitting signaling also turns to be the same as the receiving signal.

### ◆reverse frequency

Reverse frequency function reverse TX frequency and RX frequency

### ◆VOX

1) After this function is activated, if the speech volume of the user reaches the level set for the two-way radio, the two-way radio can activate transmitting operation via voice without the [PTT] key being pressed. The function above may be activated in certain workplaces where the user's hands are too occupied to press [PTT] key. Execute the operation steps below:

voice control sensitivity (selection range is 1~10; the greater the value is, the higher the sensitivity is) .

2) Return to the previous menu.

▲After the VOX function is activated, the voice can be transmitted by speaking to the microphone; the transmitting shall be stopped by stopping speaking. You can select VOX sensitivity level according to the quiet degree of service environment; in the environment where there are too

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much noises, long-time transmitting may occur after the VOX function is activated.

### ◆Busy channel lockout

This function is helping to interrupt other radio which is working, if the channel is occupied, then transmitting is forbidden.

there are two setting of this function for WP-67:

1) Carrier: if the channel is occupied, then transmitting is forbidden.

2) QT/DQT: if the channel is occupied, Received the same QT/DQT, , then transmitting is allowed.

if QT/DQT different, then transmitting is forbidden.

### ◆Squelch level setting

You can adjust the squelch level of the two-way radio by programming; screen out with weak signal or channel if the background noise is higher than common value.

▲ When the squelch level is set as 0 or too low, the two-way radio is easy to be interrupted by useless call with weak signal; when the squelch level is set too high, call from remote position may also be screened out.

### ◆TOT (Time-out time)

The TOT function 0-270s can be set by software prevents any caller from occupying too long channel time. Limit the user's over time transmit, and avoid the risk of damage to walkie talkie due to long time transmit.

### ◆bandwidth setting

You can set every channel wide/narrow band by computer

### ◆ANI ID

Wp-67 allow users use ANI identification through DTMF, there are 4 way

OFF: press/release PTT will not send DTMF code

PRE-ONLY: press PTT will send DTMF code

POST-ONLY: release PTT will send DTMF code

BOTH: press&release PTT will send DTMF code

### ◆Tail tone elimination

Tail tone elimination avoiding the impact noise made by the speaker after the call to protect users from such noise impact. After transmit over, all same frequency radio in valid distance can listen"du",means transmit over.the function can be opened / closed by software.

### ◆Battery save

The battery saving function can make the interphone reduce the work of the receiving circuit without signal reception, thus prolonging the use time of the interphone, the function can be opened / closed by software.

### ◆program password

You can set password to read/write frequency

### ◆CTCSS/ CDCSS

CTCSS and CDCSS are mainly used to avoid receiving irrelevant calls in the same frequency. If CTCSS/CDCSS is set, only calls for which the same CTCSS signaling is set in the channel within the effective communication range can be received; but if CTCSS/CDCSS isn't set, all calls in the same channel within the effective communication range can be received.

You can set the CTCSS/CDCSS signaling of this two-way radio manually via frequency writing software. CTCSS/CDCSS signaling code can be set as any value within the range of 67.0~254.1/023~754 respectively.

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### A. List of CTCSS(total 50)

67.0, 69.3, 71.9, 74.4, 77.0, 79.7, 82.5, 85.4, 88.5, 91.5, 94.8, 97.4, 100.0, 103.5, 107.2, 110.9, 114.8, 118.8, 123.0, 127.3, 131.8, 136.5, 141.3, 146.2, 151.4, 156.7, 159.8, 162.2, 165.5, 167.9, 171.3, 173.8, 177.3, 179.9, 183.5, 186.2, 189.9, 192.8, 196.6, 199.5, 203.5, 206.5, 210.7, 218.1, 225.7, 229.1, 233.6, 241.8, 250.3, 254.1

### B. List of DCS(total 105)

023, 025, 026, 031, 032, 036, 043, 047, 051, 053, 054, 065, 071, 072, 073, 074, 114, 115, 116, 122, 125, 131, 132, 134, 143, 145, 152, 155, 156, 162, 165, 172, 174, 205, 212, 223, 225, 226, 243, 244, 245, 246, 251, 252, 255, 261, 263, 265, 266, 271, 274, 306, 311, 315, 325, 331, 332, 343, 346, 351, 356, 364, 365, 371, 411, 412, 413, 423, 431, 432, 445, 446, 452, 454, 455, 462, 464, 465, 466, 503, 506, 516, 523, 526, 532, 546, 565, 606, 612, 624, 627, 631, 632, 645, 654, 662, 664, 703, 712, 723, 731, 732, 734, 743, 754

### ■Troubleshooting guide

Problem	Solution
Without power supply, the two-way radio doesn't work.	The battery may has run out. Please replace or charge the battery. The battery may be installed improperly. Please remove and re install the battery once.
The battery runs out again not long after charging.	The battery reaches its service life limit (about 300 charging and discharging cycles), please replace the battery.
The two-way radio can't make call to other members in the group.	Please confirm whether your frequency and CTCSS signal tone are consistent with that of other members in the group. Other members in the group may be too far away. Please confirm whether you are within the valid range of other two-way radios.
Communication distance is short.	Confirm whether the antenna is in good contact and is the original antenna, and whether the battery voltage is normal. Please adjusts the squelch level.
Other tones (not from group members) appear in the channel.	Please change the CTCSS signal tone. At this time, be sure to change the signal tone of all two-way radios in the group.
Noise level is high.	The two-way radio is too far away from other members. After adjusting the valid communication range, reset the two-way radio and try again. The two-way radio is in a bad location such as in a place that is blocked by a high building or in basement. After transferring the two-way radio to a flat and open place, reset it and try again. The two-way radio is interrupted by external environment or electromagnetic field. Keep the two-way radio away from equipment which may interrupt it.

▲If the methods above fail to solve your problems or you meet some other failures, please contact local dealer for more technical support.

### ■Maintenance and cleaning

To ensure that this two-way radio exerts its excellent performance, thereby extending its service life, please familiarize yourself with the content below and conduct daily maintenance and cleaning better.

#### ■Maintenance

- ◆ Don't put the two-way radio in an environment with substance that may erode electronic circuit;
- ◆ During carrying or using the two-way radio, don't hold the antenna or external microphone directly with hands;
- ◆ When the accessories are not used, close the accessory interface cover properly.



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### ■Cleaning

- ◆ Please remove the dust adhered on the surface of the two-way radio and the charging pole with clean and dry lint free cloth or brush.
- ◆ Wipe the dust and dirt on the two-way radio with lint free cloth to avoid bad contact;
- ◆ After the two-way radio has been used for a long term, its keys, control knob and shell get dirty easily. Neutral detergent (rather than highly corrosive chemical agent) and wet cloth may be used to clean them. After cleaning, be sure that the two-way radio are thoroughly dry, otherwise it shall not be used.
- ◆ When the two-way radio isn't used, close the cover of accessory jack;

Please turn off the two-way radio and take the battery out before you clean the two-way radio.

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## ■Main technical indexes

### General specifications:

Frequency range	UHF:400-480MHz
Storage channel	16 groups
Stepped frequency	25kHz
Operating voltage	DC7.4 V (rechargeable lithium battery)
Frequency stability	±1.5ppm
Operating temperature	-20℃— +50℃
Operation mode	same-frequency simple or different-frequency simplex
Antenna impedance	50Ω
Battery capacity	2800mAh
Volume	115×64×38mm (excluding antenna)

### Transmitting:

Output power	<5W/1W
Modulation (wide band/narrow band)	16KϕF3E/11 KϕF3E
Maximum frequency deviation (wide band/narrowband)	≤5KHz/≤2.5KHz
FSK allowable error rate	≤3%
Spurious power	≤7.5uW
Adjacent channel power	≤-65dB/≤-60dB
Signal to noise ratio (wide band/narrowband)	≥-45dB/≥-40dB
CTCSS/DCS frequency deviation (wide band/narrowband)	0.7±0.1KHz/0.4±0.1KHz
Modulation sensitivity	8 - 12mV
Transmitting current	≤1.5A

### Receiving:

Analog sensitivity	-122dBm (12dB SINAD)
Digital sensitivity	-120dBm(BER≤5%)
Audio power	1W
Audio distortion	<10%
Inter modulation (wide band/narrowband)	≥62dB/≥58dB
Adjacent channel selectivity (wide band/narrowband)	≥65dB/≥60dB
Receiving current	≤380mA



**All specifications are subject to change without prior notice or taking any responsibility.**