

G4000RW Fixed Wireless Terminal

User Guide



Table of Contents

1. Instructions.....	1
2. Main Features.....	1
3. Installation.....	1
4. Operation	2
5. Connectors and LED	2
6. Specifications.....	4
6.1. Power Supply	4
6.2. GSM Specifications	4
6.3. Physical Specifications	4
6.4. Environmental Specifications.....	4
Appendix: Packing List	5

1. Instructions

Thanks for buying our GSM FWT (Fixed Wireless Terminal). GSM FWT is micro controller based equipment that can be interfaced to a standard telephone to transmit voice and data through GSM.

2. Main Features

- ◆ Connection with standard telephone for voice transmission.
- ◆ Connection with the Connection Box/PC for data transmission.
- ◆ GSM Industrial module with strong function and stable performance.
- ◆ High sensitivity antenna and low TX power.
- ◆ Easy operation and maintenance.
- ◆ Parameters programmable.

3. Installation

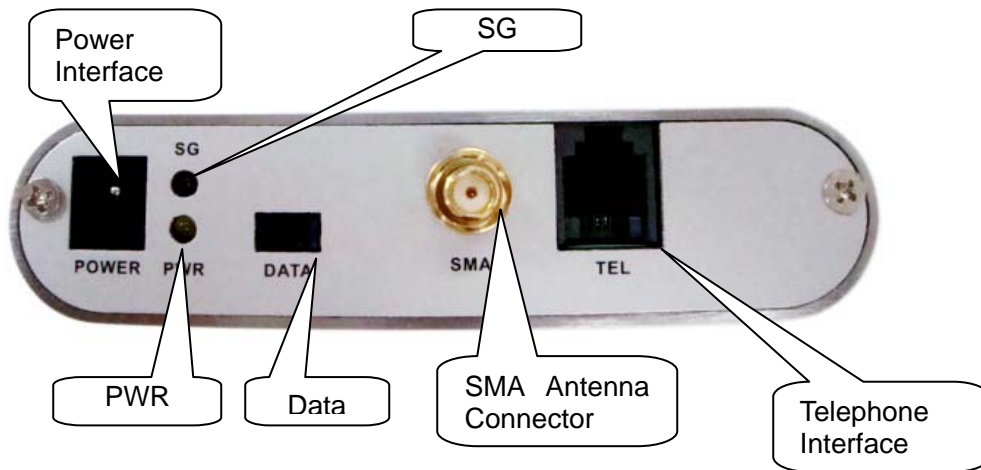
- 1) Select a suitable location for installation of the FWT that meets the following criteria.
 - a. The location must be secure from theft.
 - b. The location must be safe from falling or rising water.
 - c. The location must be within the proper distance to a power source.
 - d. The location must be such that the proper installation of an antenna is possible.
- 2) SIM card installation: The SIM card socket is built in. To install the SIM card, the user should remove the front cover, pull out the main board, and then insert the SIM card into the card socket.
- 3) Antenna installation: Connect the antenna to the SMA Antenna Connector, and then place it in the secure place.

- 4) Phone connection: Connect the telephone to the Telephone Interface on the FWT with the RJ11-RJ11 cable.
- 5) Connect the power supply to the Power Interface on the FWT.
- 6) Wait for the PWR (Power) LED to be alight.
- 7) If the LED is not alight, check the power source. Use a voltmeter to verify the DC output voltage is within the specification. If the power is correct but the LED's not light, the FWT needs to be replaced.
- 8) Verify that you have simulated dial tone on telephone test set connected to the Telephone Interface on the FWT. If not, verify that the FWT is registered to the network by observing the LED. During the registration, the "SG" LED and the "PWR" LED will flash alternatively. Once the FWT successfully registers to the network, the "PWR" LED will keep alight and the "SG" LED will be alight in standby mode. If the FWT does not register, the SIM is not valid, the signal is too weak or the FWT needs to be replaced.
- 9) Make a test call and verify proper operation.
- 10) Secure the enclosure.

4. Operation

Once the FWT successfully registers to the network, the "PWR" LED will keep alight and the "SG" LED will be alight in standby mode. Then the telephone connected to the FWT is ready for telephone service.

5. Connectors and LED



- A. Power Interface: Connected to the power supply (output: 12VDC \pm 10%, 1000MA).
- B. PWR: The abbreviation of “power”. This is to indicate the power state.
- C. SG: The abbreviation of “signal”. This is to indicate the FWT registration state.
- D. Data: This port is used for updating its software by manufacturer. New version of the software will give users a new experience. Every user who wants to update the version, should send the device to manufacturer to update it.
- E. SMA Antenna Connector: Connected to SMA antenna.
- F. Telephone Interface: Connected to standard telephone.

6. Specifications

6.1. Power Supply

- A. Input Voltage: 96-260VAC \pm 10%, 50-60Hz
- B. Output Voltage: 12VDC \pm 10% 1000mA
- C. Power Requirements: 300mA in talk mode (maximum) and 75mA in stand-by

6.2. GSM Specifications

- A. Supported Frequencies: 850/900/1800/1900 MHz
- B. Standards Compliance: GSM Phase 2/2+
 - a. Class 2 (2W @ 850/900MHz)
 - b. Class2 (1W @ 1800/1900MHz)
- C. Signal Sensitivity: <-104dbm

6.3. Physical Specifications

Fixed Wireless Terminal:

- A. Dimension: 110Lx110Wx26H
- B. Weight: 246g

Connection Box:

- A. Dimension: 48Lx44Wx23H
- B. Weight: 34g

6.4. Environmental Specifications

- A. Ambient Temperature:-10~+50°C
- B. Relative Humidity: 0%~95% non-condensing

Appendix: Packing List

■ G4000RW Fixed Wireless Terminal	x 1
■ Power Adapter	x 1
■ RJ11-RJ11 Cable	x 1
■ Magnetic Base Antenna	x 1
■ User Guide	x 1

FCC RF Exposure Information and Statement:

The Maximum Permission Exposure limit of USA (FCC) is $1\text{mW}/\text{cm}^2$. The EUT has also been tested against this MPE limit. The MPE value reported under this standard during product certification for use is $0.356\text{ mW}/\text{cm}^2$. The maximum antenna gain(dBi) allowed is 1.2589dBi. The antenna installation and operating configurations of this transmitter, including any applicable source-based time-averaging duty factor, antenna gain and cable loss must satisfy MPE categorical Exclusion Requirements of §2.1091. The antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

(b) For a Class B digital device or peripheral, the instructions furnished the user shall include the following or similar statement, placed in a prominent location in the text of the manual:

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.

FCC WARNING

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

This device must be installed to provide a separation distance of at least 20 cm from all persons and must not be collocated or operating in conjunction with any other antenna or transmitter.

NOTE: The manufacturer is not responsible for and radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.