
FWT-8888 GSM 8 PORTS FWT (GATEWAY)

USER'S MANUAL



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1,General Description:

FWT-8888 is a GSM to Analog Converter, the device can produce a FXS line to allow a regular phone to be connected and used just like a local landline(PSTN) except your calls will go out the GSM network. This device can both receive and make calls.

The main application is: Connecting the RJ-11 FXS line to VoIP gateway such as Clarent, Cisco, Quintum or Vocaltech etc. to realize VoIP call termination. It is not a VOIP gateway, It is a GSM Fixed Wireless Terminal that produces a Analog FXS phone line.

Available in GSM 900/1800Mhz dual band, GSM 900/1800/1900Mhz Tri-band, GSM850/900/1800/1900Mhz Quadband.



1, Front Picture



2, Rear Picture



3, Front Picture with Antenna connection



4, Bottom side picture

1), **Front side** has 8pcs RJ-11 ports, and LEDs display for Signal strength, Power, Working Status and Talking indicator; 2), **Rear side** has 8pcs SMA antenna connectors, Power switch for every terminal, General Power port and switch; 3), **Front side with 8pcs antennas**, this only for disFWTay picture, in installation, antenna must be put beyond 1.5 from terminal. Can't be put on the terminal, otherwise it will make noise; 4), **Bottom side** has 8pcs Sim card holder slots, you can insert Sim card for each slot when installation.

2,Features:

- 1) It is a 8 channels GSM Gateway that has 8 ports FXS interfaces.
- 2) It can connect with ordinary telephone set, PBX , VOIP Gateway, Billing meter etc.
- 3) Dialing tone frequency:450hz
- 4) EmFWToy Industrial module [Sim300(Tri-band 900/1800/1900Mhz),Sim340 (Quadband 850/900/1800/1900Mhz) or Wavcom Q2303A,Q2403A(Dual band 900/1800Mhz)] to make
- 5) Can adjust dial interval from 0.5sec to 9 secs by setting up from telephone set
- 6) Can adjust voice volume by setting up from telephone set
- 7) SIM card supported (1.8V, 3V)
- 8) Caller ID display
- 9) DTMF Dialing
- 10) Bell signal
- 11) Polarity reversal
- 12) The RJ-11 socket which connect the phone or billing system for metering purpose
- 13) Antenna socket (SMA)
- 14) IP Presetting.
- 15) Working status and Signal Strength by LED indicator
- 16) IMEI Change (optional)

3,Technical Specifications

Air interface standard: GSM850/1900Mhz,900/1,800Mhz phase 2+ full band

Frequency ranges:

- | | |
|-----------------------------------|-------------------------------------|
| A) GSM 850 | GSM 1900: |
| I) Transmission: 869.2 ~ 893.8MHz | I) Transmission: 1, 930 ~ 1, 990MHz |
| li) Reception: 824.2 ~ 848.2MHz | li) Reception: 1, 850 ~ 1, 910MHz |
| B) GSM 900: | GSM 1800: |
| I) Transmission: 890 ~ 915MHz | I) Transmission: 1, 710 ~ 1, 785MHz |
| li) Reception: 935 ~ 960MHz | li) Reception: 1, 805 ~ 1, 880MHz |

Phone interface: supFWTy RJ-11 Phone Interface

Hanging voltage: 45V

Picking off voltage: 30mA / 41mA

Dialing tone Frequency: 450Hz

Antenna interface: Antenna amFWTifying>2.5db

Sensitivity:<-104DBM

Transmitting power<3W

AC-Adapter interface: INPUT: AC 110~240V

OUTPUT: 5V 7A

4,Operation Circumstance:

Operation temperature: -10c~60C

Storage temperature:-20C~70C

Operation humidity:45%-95%

Atmosphere pressure:86-106Kpa

Environment noise: <60DB

Transmitting Power:2W

Sensitivity: <-104dbm
Antenna AmFWTifying: >1.5db
Dialing frequency: 450Hz
Hanging voltage: 45V
Picking current: 30mA/41mA

5,Checking Package:

FWT-8888 GSM 8 PORTS FWT 1pcs; Power Supply Cable 1pcs, GSM Antenna with 3m cable 8pcs, User's Manual 1pcs.

Product dimension: L455x W280 x H45mm

Gift box dimension: L510x W170x H64mm

G.W: 4.5kg

6,Installation And Connection

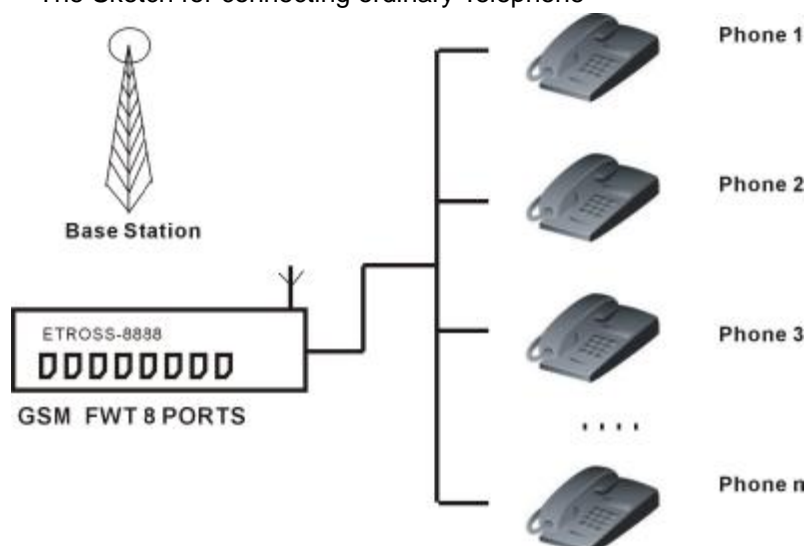
The Condition for Installation

The terminal asks for 110- 220V AV power supply. It must be installed in the area where the GSM network can cover. The strength of the signal can affect the quality of voice.

1. Screw off the screws that are on the back of the terminal, Insert SIM card for every Sim card holder, and then tighten the screws.
2. Install antenna. In order to ensure the quality of voice, antenna must be put beyond 1.5 from the telephone and terminal.
3. On end of the telephone line connects to the "Phone" port of the terminal, the other end connects to telephone.
4. "Power" port connects to power adapter that is connected to 110-220V AC power supply.

1) The Installation for Connecting to Ordinary Telephone

The Sketch for connecting ordinary Telephone



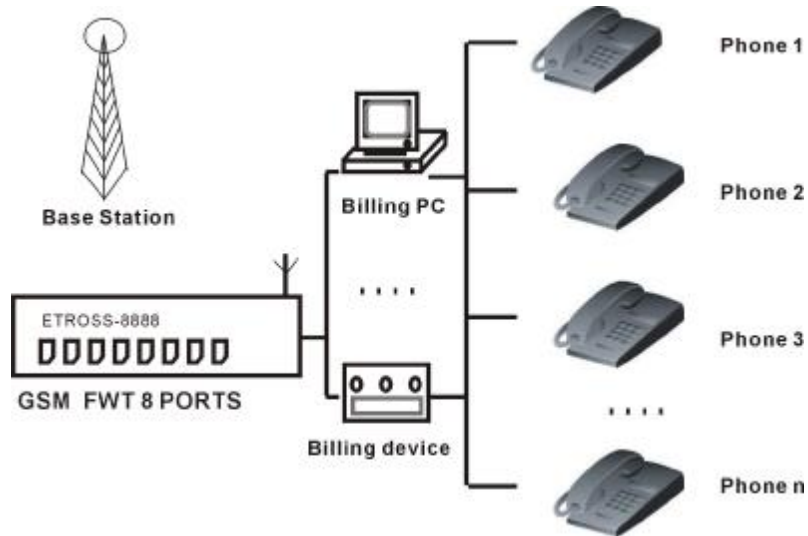
Draw your attention: Because there are many types of ordinary telephone and their electric parameters are different. In order to avoid mutual disturbance between telephone and terminal and affect voice quality. The distance between telephone and terminal is 1.5m at least.

2) The installation for connecting to billing device for metering

If the users demand to register cost during calls, billing device can be connected between

terminal and ordinary telephone. Billing device register cost according to the anti-polarity signal that is provided by terminal.

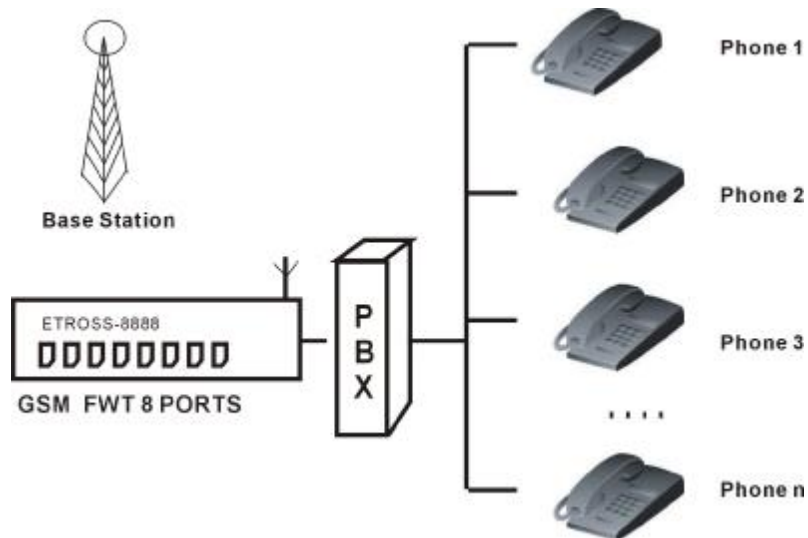
The sketch for connecting to Billing device or Computer charging system



3) The installation for connecting to PBX for call extentions

If users want to connect small PBX to this terminal, connect terminal's "Phone port" to the PBX.

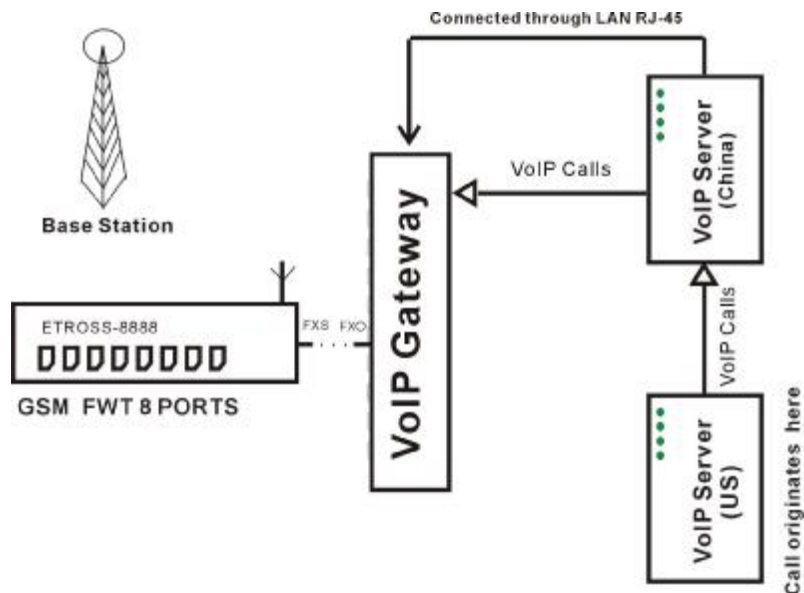
The sketch for connecting to PBX device.



4) The installation for connecting VoIP gateway for Call Termination

Suppose a VoIP call originates from US, which was transferred from US Server to China Server on VoIP, finally the call will be terminated from internet to GSM network and to be sent out to the destination answer side.

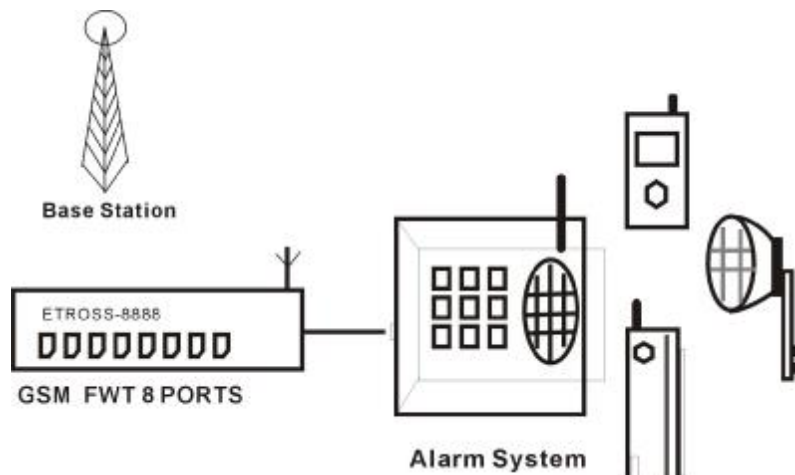
The sketch for connecting to VoIP gateway



5) The installation for connecting to alarm system for Security

The GSM FWT can substitute the PSTN for connecting to alarm system for security purpose when PSTN failure or not available.

The sketch for connecting to alarm system



7, Function Setting

1) Adjust Voice Volume (under development).

2) Adjust dial interval

You can edit the dial interval by setting up from telephone set. Lift handset or press hands free key, then input `*#01#30#` , Factory default setting is 3 seconds, you can set from Min 0.5 second, Max 9.9 seconds, So If you want to set dial interval as 0.5 second, Method: `*#01#05#`, you will hear 2 beeps, this testify set successfully. Restore to factory setting: `*#99#99#`.

***If you use FWT-8888 for connecting to VoIP gateway ,you can set dial interval as 0.5 second, it can make PDD<5 sec**

***If you use FWT-8888 for connecting telephone, PBX, billing device, you can set dial interval as 3 seconds or 5 seconds as you like.**

3) IMEI change (under development)

8, Making Calls and Answer Incoming Calls

Making Calls

1. Lift the handset or press “hand-free” key, you will hear dialing tone, then you can dial the telephone numbers you want to call.
2. Dialing: dialing the telephone numbers you want to call
3. On completion of dialed digits, you can press “#” to transmit the called telephone numbers. If you don’t dial any key for continual 3 seconds during the dialing, terminal transmits called telephone numbers automatically.
4. During calls, if the telephone numbers is not free ones, the terminal sends out anti-polarity signal.
5. If the calling party or called party hangs up, the terminal stops sending out anti-polarity signal.

Answering Incoming Calls

When some calls are coming in, if the connected telephone has the function of displaying incoming calls, the telephone rings and displays the incoming telephone numbers. Now users can lift the handset or press “hand-free” to answer it.

The Instructions for Terminal’s Running Status

1. The instruction for initializing terminal
When Power indicator is lit, the terminal begins to initialize. If Status indicator and Used indicator are flashing simultaneously, the terminal is searching for network. About 15~45 seconds later, the telephone rings that indicates the process of initialization terminal finishes. If Warn indicator stays lit, initialization is unsuccessful. On this condition user can set parameters for the terminal but the terminal can’t be used to make any calls. If users dial telephone numbers, the Warn indicator will flash and the telephone will give out the sound of three-time toot to ask the user to hang up.
2. While users dialed barred numbers or other error numbers, the telephone gives out the sound of three-time toot to indicate that user should hang up and redial.
3. While you are lifting the handset and don’t dial any key for continuous 15 seconds or nobody answer the dialed telephone for 90 seconds after the called telephone has ringed, the telephone will give out the sound of three-time toot to indicate the user to hang up. If the user doesn’t hang up for a long time, all indicating sound will stop after 1 minute.
4. While calls coming in, Used indicator flashes. If user answers the call, the Used indicator stays lit until the call is hung up.
5. When user is lifting the handset, Used indicator stays lit until user hangs up.
6. When the terminal receives SMS, Warn indicator and Used indicator both stay lit that indicates that the terminal is dealing with SMS.
7. If Warn indicator stays flashing and the telephone continuously gives out the sound of three-time toot, which indicates that the terminal is on the warning status. please hang up.