

### Basic Cellular Modem Gateway 2023 User Manual



#### Thank you for purchasing this GTEN<sub>®</sub> modem product.

You can visit www.gtenamerica.com/support to obtain more information about your product, get help, access the latest downloads and manuals.

We recommend that you use only official  $GTEN \ensuremath{\scriptstyle \bullet}$  support resources.

1

# GTEN. Modem

#### Table of Contents – Modem Features

#### Introduction Page No. Introduction and Hardware Overview 5 Package Contents 6 Install the Micro SIM Card 6 7 Front Panel with Status LEDs Back Panel with Connectors, Buttons, and a Ports 8 Install the included antennas 8 Modem Labels 9 10 Positioning the Modem **Optional External Antenna** 10

| Get Started   | Page No. |
|---|----------|
| Internet Connection Over Mobile Broadband                             | 11       |
| Connect a Computer, Switch, Hub, Router, or Wi-Fi Router to the Modem | 11       |
| Connect a Computer to the LAN Port of the Modem                       | 12       |
| Connect a Router or Wi-Fi Router to the LAN Port of the Modem         | 12       |
| Access the Modem's Web Pages for the First Time                       | 13       |
| The Main page (Network Map)   | 14       |

| Advanced Settings                           | Page No. |
|---|----------|
| Manage the Wireless Settings                | 17       |
| Manage the LAN Settings                     | 18       |
| Manage the Firewall Settings                | 20       |
| Manage Cellular Settings (APN/Band locking) | 21       |
| Manage Modem Web Interface Administration   | 23       |
| 1. Perform Reboots/Hard Factory Resets      | 23       |
| Connected Devices                           | 23       |

#### Manage the Mobile Broadband Connection

#### Page No.

| Manage Mobile Broadband Auto Connect Options                        | 15 |
|---|----|
| Manually Connect to or Disconnect from the Mobile Broadband Network | 26 |
| Manage APN Profiles for Mobile Broadband Connections                | 21 |
| View the current APN  | 21 |
| Add a Custom APN  | 21 |
| Change an APN   | 21 |

| Secure Your Network   | Page No.     |
|---|--------------|
| Manage Port Forwarding for Incoming Traffic                 | 20           |
| Enable Port Forwarding and Add a Service or Application     | 20           |
| Remove a Service or Application for Port Forwarding         | 20           |
| Disable Port Forwarding                                     | 20           |
| Manage IP/Port Filtering for Outgoing Traffic               | 20           |
| Disable Port Filtering                                      | 20           |
| Manage the Modem and Monitor Usage and the Network          | Page No.     |
| Return the Modem to Its Factory Default Settings            | 23           |
| Use the back panel reset button                             | 8            |
| Use the Modem's Web Pages to return to Factory Defaults     | 23           |
| View Service Provider, Type of Service, and Signal Strength | 14           |
| View Other Details About Your Modem                         | 14           |
| View Information About the Mobile Broadband Connection      | 14           |
| How do I access the modem's web pages?                      | 13           |
| General Troubleshooting                                     | Page No.     |
| What do I do when I can't connect a device to the modem?    | Starts on 24 |
| What do I do when I can't access the Internet?              | 24           |
| What do I do when the NET icon display is not lit?          | 24           |
| Why does the Signal Strength LED show only a few bars?      | 25           |
| Why is the download or upload speed slow?                   | 25           |
| Can I connect multiple LAN devices to the modem?            | 25           |
| What do I do if I forget my admin login password?           | 26           |
| How do I disconnect from the mobile broadband network?      | 26           |
| How do I find my computer's IP address?                     | 26           |
| Why can I not log into the Modem Web interface?             | 27           |
| Troubleshoot the Mobile Broadband Internet Connection?      | 27           |
| Can a Public Static Internet "IP" Address be used?          | 27           |
| Default Settings and Specifications                         | Page No      |
| Technical and Environmental Specifications                  | 28           |
| Supported Mobile Broadband Bands                            | 28           |
| Warranty Information  | 29           |
| FCC Declaration of Conformance                              | 29/30        |
| FCC RF Radiation Exposure Statement (SAR)                   | 29/30        |
| Safety Warnings   | 31           |
| Safety and Compliance                                       | 31           |
| Maintenance & Care  | 32           |
| Legal Notices   | 32           |

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This manual covers the following modem products:

GTEN Model 4 R3 GTEN Model 4 R2 GTEN Model 4 GTEN 4GAS Model 3/3A GTEN Model 1 DYNAMI Models 4/2/1

Colors, modem designs and interfaces may vary from unit to unit.



### Introduction and Hardware Overview

This section provides a basic introduction and hardware overview:

- $\cdot$  Device Introduction
- Package Contents
- Installing the Standard SIM Card
- Front Panel with Status LEDs
- · Back Panel with Connectors, Buttons, and a Ports
- Modem Label
- Positioning the Modem
- Optional External Antenna

### **Device Introduction**

The GTEN® Modem model, in this manual referred to as the modem, can provide broadband data services to areas where wired Internet is not readily available or is difficult, costly, or time-consuming to install. The modem uses existing mobile networks with automatic fallback to 4G/LTE mobile networks to provide broadband data services.

The GTEN® Modem mobile network connection can provide high-speed Internet access for multiple users and devices in homes and offices.

Alternatively, you can connect the GTEN® Modem to an existing DSL, cable, or fiber optics gateway that supplies WAN ports so that the modem can provide a backup Internet connection for your home or office to achieve continuous connectivity. Professional installation and configuration are not required. When a SIM card is installed and activated, by default, the modem automatically searches for and connects to your network provider's mobile broadband network.

For information about installing the modem, see the quick start guide, which is included in your new modem box kit.

In the unlikely situation that the modem does not automatically connect to your network provider's mobile broadband network, you might need to add an access profile name (APN) profile.

For information about adding an APN profile, see View APN Profiles or Add a Custom APN Profile.

5

### Package Contents

Your package contains the following items:

- GTEN<sub>®</sub> Modem
- 2 x Cellular SMA antennas
- 12 Volt 2 Amp power adapter
- Quick setup card



### Install the SIM Card

A standard SIM card might be preinstalled in the modem, or you might need to obtain a SIM card and install it yourself. To obtain a SIM card, contact your mobile broadband Internet service provider.

Overview of installing the SIM card:

To install a SIM, the gold side faces towards front of the modem and the SIM notch faces downward. (See example)





To install the SIM card in the modem:

1. Ensure that power to the modem is off.

- 2. Place the modem horizontally with the front display panel facing you.
- 3. Insert the SIM card in the desired SIM slot (SLOT 1 is always recommended)
- 4. The SIM should lock into place by using your finger to push the SIM into the slot.
- 5. Turn on the power to the modem by connecting the power adapter.

### Front Panel with Status LED's

The modem displays status LED bars on the front panel. (From left to right)



- 1. **SYS** light indicates POWER status when solid lit modem has power.
- NET light indicates INTERNET connection when solid lit modem has connection to the internet.
- 3. **RF** lights indicate SIGNAL strength, the more RF lights lit the better the signal reception from the mobility tower.
- 4. SIM light indicates SIM CARD is being read by the modem when solid lit.
- 5. **WIFI** light indicates an active broadcasting wireless network for you're at home devices, when lit SOLID this means the network is ready for connection, when blinking this means WIFI data is transmitting data to its connected devices.
- 6. **WPS** light indicates that the WPS service is ready to connect when solid lit.
- 7. **ETH1** light indicates that the Ethernet cables are active and transferring data over Ethernet cables.
- 8. **4G** light indicates that the communication with the local tower, when lit the modem is successfully obtained signal from the tower.
- 9. **BATT** light indicates that the modem has an internal battery unit and is charging, battery is sold separately.

7

# Back Panel with Connectors, Buttons, and Ports

The following figure shows the ports, connectors, and buttons on the back panel of the modem.

From left to right, the back panel of the modem provides the following components:



- 1. USB port for software updates.
- 2. LAN Ethernet port for wired devices including Wi-Fi extenders and routers, Ethernet switch or hub, or single computer.
- 3. Hard Reset button (Hold for 15 seconds to clear information) A Pin will be required to reset.
- 4. Power Button
- 5. Power supply port for power adapter connection.
- 6. Battery location.
- 7. Antenna ports, location to attach screw on or outdoor antennas.

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### Install the included antennas.

The modem kit comes with up to 2 SMA antennas. (Antenna picture may vary from model to model)

Install the antennas on the back ports



### Modem Labels

In addition to the default URL and password to access the modem's web pages, the modem label on the back or bottom panel shows the following information:

- Serial number (SN)
- Stock keeping unit (SKU) number
- MAC address
- IMEI (International Mobile Station Equipment Identity) (On separate sticker)

Modem label examples:



### Positioning the Modem

Before setting up the router, it is recommended to take the following into considerations for optimal signal strength:

- Near a window where the signal is mostly uninterrupted.
- On a flat surface.
- Keep a minimum distance of 35 centimeters between the router and your body.
- In an open space with as few blocking objects or obstructions as possible. For instance, make sure the number of walls and ceilings between the router and your wireless devices are.
- Elevated surface.
- Keep the router away from 802.11g or 20MHz only Wi-Fi devices, 2.4GHz computer peripherals, Bluetooth devices, cordless phones, heavy-duty motors, fluorescent lights, and some industrial equipment that may generate signal interferences with your router.
- Do not place heavy objects on the device, for instance, sitting on the device.
- Avoid positioning it:
- next to a wall that may obstruct the signal.
- near heavy-duty appliances.
- close to metal fixtures, enclosures, cabinets, or thick concrete.
- in a basement.
- on the floor or lower surface.

### **Optional External Antenna**

You can purchase an external multiple input, multiple output (MIMO) antenna for the modem to extend the mobile broadband signal range indoors or in fringe network areas. The modem uses SMA ports for its external antenna port(s).

The external antenna plugs into the two (four for 5G model) antenna connectors on the back of the modem to boost speeds and extend coverage in buildings or vehicles, or in remote sites where network coverage is sparse. You could, for example, attach the external antenna to the outside window.

Visit gtenmaerica.com for our Outdoor external 5G/LTE antenna designed for your modem.

### Get Started

This section describes how to connect to the modem. To get started, you do not need to configure the mobile broadband connection unless your modem does not come with a SIM installed.

The chapter contains the following sections:

- Internet Connection Over Mobile Broadband
- Connect a Computer, Switch, Hub, Router, or Wi-Fi Router to the Modem
- Access the Modem's Web Pages for the First Time

## Internet Connection Over Mobile Broadband

By default, when the modem powers up with a SIM card installed, it automatically searches for and connects to your network provider's mobile broadband network.

This process might take several minutes. The SIM card that is installed determines the mobile broadband network to which the modem connects.

Even though the modem might connect to the mobile broadband network of the same service provider each time that you start the modem, the type of mobile broadband service to which the modem connects might differ.

**Pro Tip:** If the modem does not automatically connect to the mobile broadband network after 5 minutes, the **SYS** Power LED remains solid, and you might need to contact your mobile service provider to get the access point name (APN) profile information and activate a custom APN profile in the modem.

# Connect a Computer, Switch, Hub, Router, or Wi-Fi Router to the Modem

By default, the modem functions in Router mode with the DHCP server enabled and IP pass-through (IPPT) disabled. This means that you can connect multiple devices to the modem, for example, through an Ethernet switch or hub, and that each device can receive an IP address from the modem.

# Connect a Computer to the LAN Port of the Modem

You can add a single computer to the Ethernet local area network (LAN) of the modem.

To connect a computer to the Ethernet LAN of the modem:

1. Attach one end of the Ethernet cable that came in the product package to an Ethernet port on your computer.

2. Attach the other end of the cable to the Gigabit Ethernet LAN port on the back panel of the modem.

# Connect a Router or Wi-Fi Router to the LAN Port of the Modem

You can add a router or Wi-Fi router to the Ethernet local area network (LAN) of the modem.

To connect a router or Wi-Fi router to the Ethernet LAN of the modem:

1. Attach one end of the Ethernet cable that came in the product package to an Ethernet port on your

router or Wi-Fi router.

2. Attach the other end of the cable to the Gigabit Ethernet LAN port on the back panel of the modem.

## Access the Modem's Internal Web Pages for the First Time

The modem comes configured and ready to use. You can use the modem's web pages to monitor data usage and change basic settings.

You can log in to the modem's web pages over an Ethernet cable, The modem's web pages run on any device with a web browser such as Google Chrome, Mozilla Firefox, and Microsoft EDGE.

To access the modem's web pages:

1. Launch a web browser from a device that is connected to the modem.

The device can be a computer that is directly connected to the modem or a client from a router that is connected to the modem.

2. In the URL address field of your browser, enter 192.168.1.1

3. To access the full Dashboard page and other pages, you must enter your username and password which are both set by default to **GTEN** (Older units may use: **admin**)

See the modem label for the default password.

While the password that you enter is unique to your modem and is secure, we

recommend that you change it to a password that you want to use.

a. If you do not want to enter your password each time that you access the modem's web pages, select the Remember me check box on your browser.

b. Click the Sign In button or hit <enter>. (See example)

| 192.168.1.1/index.html#entry |                               |          |       |           |  |
|------------------------------|-------------------------------|----------|-------|-----------|--|
|                              | GTEN.<br>MERICA<br>ASIC MODEM |          |       | English v |  |
|                              |                               |          |       |           |  |
|                              |                               | Password | Login |           |  |
|                              | l                             |          |       |           |  |
|                              |                               |          |       |           |  |
|                              |                               |          |       |           |  |

When the full GTEN "Front" page displays. You are now ready to monitor the modem and manage the settings.

If you cannot log in to the modem or your browser does not display the Dashboard page, check the following:

• Make sure that the computer, router, or Wi-Fi router is connected to the LAN Ethernet port of the modem or you have established a Wi-Fi connection.

• Make sure that your browser does not cache the previous page by closing and reopening the browser.

• If your computer is set to a static or fixed IP address (this type of setting is uncommon), change the setting to obtain an IP address automatically from the modem.

What you should see when first logged in: (The Main Page)

### The Main page

On this page you will find all the modem connection information. Below is an explanation of what each response means:



GTEN America Inc. ~ https://gtenamerica.com - For self help videos visit GTEN Modem Help Videos

#### From the Top Left Corner (Left to right):



- Cellular connectivity status

- Cellular carrier
   Cellular signal indicator
   Internet traffic indicator
   SIM card present indicator
   Wi-Fi indictor and amount devices using Wi-Fi.
- 7. Battery present and charging indicator. (Not available on some models) (Battery sold separately if modem is compatible.)

#### Advanced settings click menu Near the top Left Corner (Left to right):



5. Language selector.

The Main menus (Information Boxes) (Left to right):

#### LTE Connect Status Box

- **ON/OFF Switch** When switched on the modem is actively talking with the tower, this device requires you switch the button to off when making any changes to the device.
  - 1. **LTE Connected Time:** How long the modem has been connected to the tower.
  - 2. **Network type:** Type of communication technology being used by the modem.
  - 3. Current APN: Current name of the access point used by the carrier.

#### LTE Network Status Box

- Network Settings Provides a link to additional settings menus related to APN settings, Band • locking and Antenna options.
- 1. **Signal Strength:** Provides signal information regarding the tower connection.
- 2. **Signal Quality:** Provides signal quality information regarding the tower connection.
- 3. Channel: Indicates the current connection channel being used.

- 4. Tower ID: Indicates the current tower ID being used.
- 5. My IP: Indicates the current assigned IP address from the wireless carrier.

#### Wi-Fi Information Box

- <u>Wireless Settings</u> Provides a link to additional settings menus related to Wi-Fi settings.
- 1. **WIFI NAME(SSID):** Provides the current WI-FI name that is broadcasting.
- 2. WIFI Password: Displays current WI-FI password,
- 3. Device Connected: Displays current number of devices connected to the modem.

#### Data usage information Box

Provides a link to additional settings menus related to recording usage.

#### **Status Information Box**

- 1. Assigned Number: May display current wireless number of the SIM card.
- 2. Sim Card Number: Will show the complete SIM card number of the card inserted.
- 3. Serial Number: Displays the current assigned DEVICE ID
- 4. Network Name (Main SSID): Provides the current WI-FI name that is broadcasting.
- 5. Hardware Version: Shows the modem's model name.
- 6. Software Version: Displays the current firmware number.

### Manage Network Settings

Options available in this menu:

#### 1. Network Selection

- In this menu you can determine the cellular connection method and how the modem connects to the carrier. (It is highly recommended that you only edit this section at the instruction of your technical support representative.)
- 2. APN
- In this menu you can set the cellular connection name (APN). Normally this menu is preprogrammed by your carrier, however if you switch carriers or SIM cards it may be required for you to reprogram this setting. (See APN settings for more information.)
- 3. Network Settings
- In this menu you can set the cellular connection channels. Normally this menu is preprogrammed to receive all connection channels, however if you have poor signal on one channel it may be advantageous to move to another channel where available. (See APN settings for more information.)

#### 4. Antenna

• In this menu you can set the antenna options to choose the modems internal antenna for cellular reception or choose to use an external outdoor antenna (sold separately) for enhanced signal gain.

### Manage the Wireless Settings

This section describes how to manage the Wi-Fi settings, Options Available are:

- 1. Main SSID
- 2. <u>Guest SSID</u>
- 3. <u>WPS</u>
- 4. Advanced Settings
- 5. WLAN MAC Filter

Under the primary Wi-Fi settings page:

- Wi-Fi Switch Use this option to enable or disable the Wi-Fi
- Multi SSID Switch Use this option to enable or disable the GUEST Wi-Fi

#### Main SSID menu:

- Channel \* This is where you set your SSID (Wi-Fi Name), by default it will be GTEN\_XXXXXX
- SSID Broadcast Check this option to show your Wi-Fi network to all devices.
- Security Mode This option sets the security encryption method for your Wi-Fi network.
- Pass Phrase \* This option allows you to set a Wi-Fi password, requires 8 alpha numeric characters or more. By default, the password is set to 1234567890
- Display Password Check this option to display your current Wi-Fi password.
- Max Station Number This option sets how many devices can connect to your Wi-Fi network.

#### Guest SSID menu: (If enabled will have the same options above)

#### WPS (Wireless Protected Setup) menu:

- SSID This is where you choose which SSID will use WPS.
- WPS Choose an option to connect your Wi-Fi devices to the modem.
  - A. PIN Allows you to set up an 8-digit PIN number for WPS.
  - B. PBC Allows you to press the button on the side of the modem to connect to the devices instead of using a PIN number.

#### Advanced Settings menu: (Related to Wi-Fi settings only)

- Band Selection Displays current Wi-Fi technology.
- Network Mode This option allows you to set the type of Wi-Fi technology.
- Channel Bandwidth This option allows you to set the hertz of Wi-Fi technology.
- Country/Region Code This option allows you to set the country of Wi-Fi technology.
- Frequency (Channel) This option allows you to set the channel of Wi-Fi technology.

17

#### WLAN MAC Filter menu:

- MAC Filter Format This option allows you to set permissions of which device is authorized to connect to the Wi-Fi network.
  - A. Ruleless Allows all devices to connect.
  - B. Whitelist Allows the authorized device to connect.
  - C. Blacklist Restricts the device to connect to the modem.

**Pro Tip:** When choosing the wireless connection method be sure that your device can work with the appropriate wireless technology. For example, old devices and many small wireless devices require the 2.4Ghz network and new items like tablets, laptops and Televisions require the 5Ghz network. Be sure to check with your device instructions for the appropriate connection method.

### Manage the Modem LAN Settings

To Manage the LAN Settings, click on the Advanced Settings menu at the top of the main page, always

remember to make any changes to the device you must first set the on/off switch on the main page to off.

#### This section describes how to manage the LAN settings.

|            |                   | Modem Manual Advanced Settings Reset Connection L | ogout English |
|------------|-------------------|---|---------------|
| <          |                   | Advanced Settings                                 |               |
| Power-save | Router            |   |               |
| _          | IP Address *      | 192.168.1.1                                       |               |
| Router     | Subnet Mask *     | 255.255.255.0                                     |               |
| Firewall   | DHCP Server       | Enable     ODisable                               |               |
| Others     | DHCP IP Pool *    | 192.168.1.2 - 192.168.1.254                       |               |
| Officia    | DHCP Lease Time * | 999 hour(s)                                       |               |
|            |                   |   | Apply         |
|            |                   |   |               |
| Address:   |                   | 192.168.1.1 192.168.1.1                           |               |

#### BASIC MODEM Manual 2023

| This section is where you can modify your modem's<br>gateway IP address. By default, the address is<br><b>192.168.1.1</b>  |                                    |   |
|--|------------------------------------|---|
| Subnet Mask:   |                                    |   |
| This section is where you can modify your modem's<br>Subnet Mask address. By default, the address is<br><b>255.255.255.0</b>   | 255.255.255.0 2                    | 255.255.255.0                                 |
| Enable DHCP Server   |                                    |   |
| This section is where you can allow your modem to<br>Dynamically produce local IP addresses to your<br>connected devices. By default, this option is<br><b>ENABLED</b>   |                                    |   |
| IP Pool:   |                                    |   |
| This section sets the beginning range of your DHCP pool. By default, this option is set to <b>192.168.1.2</b> to allow for the maximum amount of DHCP devices.   | 192.168.1.2                        |   |
| IP Pool Ending Address: Set to the end of the range  | 192.168.1.254                      |   |
| DHCP Lease Time (sec):   |                                    |   |
| This section sets the lease time of each device on<br>your DHCP pool. By default, this option is set to <b>999</b><br><b>hours</b> to allow for the maximum amount of time for<br>the connected DHCP devices.  | 999 Hours (defaul                  | †)  |
| When you are all set. Click the  | vlag                               | button to save your changes                   |
| <ul> <li>pool. By default, this option is set to 192.168.1.2 to allow for the maximum amount of DHCP devices.</li> <li>IP Pool Ending Address: Set to the end of the range</li> <li>DHCP Lease Time (sec):</li> <li>This section sets the lease time of each device on your DHCP pool. By default, this option is set to 999 hours to allow for the maximum amount of time for the connected DHCP devices.</li> <li>When you are all set. Click the Addressing Addr</li></ul> | 192.168.1.254<br>999 Hours (defaul | <sup>t)</sup><br>button to save your changes. |

**<u>Pro tip</u>**: Once your settings are saved, you may lose connection to your devices or the WEB interface, if this happens you may need to restart the modem also any device that is connected to the modem is disconnected when the modem restarts.

19

### Manage the Firewall Settings

To Manage the Firewall Settings, click on the Advanced Settings menu at the top of the main page, always remember to make any changes to the device you must first set the on/off switch on the main page to off. This section describes how to review the firewall settings.



- **Port Filtering** is a feature in which packets that are ingresses through a source port can be blocked for egressing on a specific set of ports.
- **Port Mapping** allows Internet users to access servers on the Intranet, you need to perform port mapping on the Router of the egress gateway so that services on the Intranet can be accessed through the public IP address of the egress gateway plus the service port number.
- **Port Forwarding,** also known as port management, allows remote servers and devices on the internet to be able to access devices that are on a private network. If you are not using port forwarding, only devices on that private internal network can have access to each other or your network.
- **URL Filtering** is a way of "blocking" certain URLs from loading on a company network. If an employee would attempt to visit this URL, either by entering it manually or clicking a link in a search engine, they will be redirected to a page notifying them that this content is blocked.
- **UPnP** makes the gaming experience a lot more convenient. You won't be able to play some games or connect with some players online if you don't have UPnP enabled. Alternatively, you can also use port forwarding but that can be a hassle.
- **DMZ** or demilitarized zone is a perimeter network that protects and adds an extra layer of security to an organization's internal local-area network from untrusted traffic.

**Pro tip:** For more information on these settings visit google.com on how to set each of these settings and for more information on the proper usage. Use caution when adjusting the default settings as they make your device not work properly.

### Manage Cellular Network Settings

To Manage the Cellular Network Settings, click on the Network Settings link in the LTE Network Status menu at the center of the main page, always remember to make any changes to the device you must first set the on/off switch on the main page to off.

| <                 |                | Connection Settings |
|-------------------|----------------|---------------------|
| Network Selection | APN            |                     |
| _                 | Current APN    | broadband           |
| APN               | Profile        | broadband           |
| Network Settings  | PDP Type       | IPv4 ~              |
| Antenna           | Profile Name * | broadband           |
|                   | APN *          | broadband           |
|                   | Authentication | NONE                |
|                   | User Name      |                     |
|                   | Password       |                     |
|                   | Dial No.       | *99#                |
|                   | 0              |                     |
|                   |                |                     |

#### APN (Access Point Name) menu:

- **Current APN** Provides the current set APN.
- Profile Choose an option to connect to your preset APN.
- Add New By pressing this button you can add a new APN profile.
- **PDP Type** Allows you to set the IP protocol used with the APN.
- Profile Name Allows you to set the desired profile name to be used with the APN.
- **APN** Allows you to set the carrier's APN name needed for internet connection.
- Authentication Allows you to set the APN's security requirements if needed.
- **User Name** If required by your carrier for your APN settings.
- **Password** If required by your carrier for your APN settings.

When you are all set. Click the

Apply

button to save your changes.

1. Below are some general APN's used by the United States carriers, you internet service provider will provide you the correct APN to use based on your plan.

| Carrier                  | PDP    | Profile   | APN               | Authentication |
|--------------------------|--------|-----------|-------------------|----------------|
|                          | Туре   | Name      |                   |                |
| Verizon                  | IPv4v6 | VZW5G     | V5GA01INTERNET    | NONE           |
| Verizon<br>LTE           | IPv4v6 | VZW       | vzwinternet       | NONE           |
| Verizon<br>(Static)      | IP∨4   | VZWSTATIC | so01.VZWSTATIC    | NONE           |
| AT&T                     | IPv4v6 | ATT       | broadband         | NONE           |
| AT&T<br>IIC              | IPv4   | ICCA      | 4gascrs.neo       | NONE           |
| T-<br>Mobile<br>Internet | IPv4v6 | ТВІ       | fbb.home          | NONE           |
| T-<br>Mobile             | IPv4v6 | ТМО       | fast.t-mobile.com | NONE           |
| US<br>Cellular           | IPv4v6 | USCC      | Internet          | NONE           |

Network Settings menu: (Related to Cellular Network settings)

- **Frequency Band Indicator** Provides the current connection channel the modem is using.
- **PING WWW.GOOGLE.COM** By choosing this option, the modem will constantly contact the google server to ensure connection. When enabled, if no communication is made with the server the modem will automatically reboot. It is recommended to leave this feature DISABLED unless you require this function.
- **Set Frequency Band** This option allows you to set the cellular frequency of the modem, by default the modem is open to all connection channels.

Below are some channels used by the United States carriers.

| Carrier     | Channel(s) Available        |
|-------------|-----------------------------|
| Verizon     | 2, 4, 5, 13, 66             |
| AT&T        | 2, 4, 5, 12, 17, 30, 66     |
| T-Mobile    | 2, 4, 5, 12, 25, 26, 41, 66 |
| US Cellular | 2, 4, 5, 66                 |

When you are all set. Click the

Apply

button to save your changes.

#### Modem Web Interface - Perform Reboots/Hard Factory Resets

To reboot or factory reset the device, click on the Advanced Settings menu, and then click on others menu, always remember to make any changes to the device you must first set the on/off switch on the main page to off.

| <          | Advanced Settings   |  |  |
|------------|---|--|--|
| Power-save | Restart and Reset Please login again after rebooting or resetting router                              |  |  |
| Router     | Restart Device Reset Factory Settings   |  |  |
| Firewall   | SNTP  |  |  |
| Others     | Current Local Time     2023-08-26 23:41:53 Saturday       Time Set Mode     Sntp auto Synchronization |  |  |

Others menu in Advanced Settings:

- Restart the device Click on the button to reboot the modem.
- Reset Factory Settings Click on the button to reset the modems previously configured settings.

This section is where you reset your modem to factory default settings using the Factory Default reset button. **Remember to only do this when instructed to do it.** 

### **Connected Devices**

This section shows what devices are connected to your modem.

| < | ,       | All of wireless devices connecte | Wi-Fi Informatic<br>ed to this router will show on the pa | On<br>ge, including device name and MAC add | Iress |
|---|---------|----------------------------------|---|---|-------|
| W | /ireles | ss Access Device                 |   | MAC Addr                                    |       |
|   | o data  | nost Name                        |   | MAC AUG                                     |       |
| с | able /  | Access Devices                   |   |   |       |
| 1 | No.     | Host Name                        |   | MAC Address                                 |       |
| 1 | 1       | DESKTOP-2DM65EI                  | Ē   | 00:E0:4C:68:01:1D                           |       |
|   |         |                                  |   |   |       |

### **General Troubleshooting**

This section describes how to possibly resolve modem issues that may arise.

**Pro Tip:** Most modem issues are resolved by just unplugging the device from the power cord for 30 seconds and plugging the modem back in.

**Pro Tip 2:** Do not factory reset the device unless instructed by a trained representative or you will lose broadband connection and will have to program the modem from the beginning.

#### What do I do when I can't connect a device to the modem?

Some suggestions listed below:

- 1. Restart your equipment and try both Wi-Fi SSID's as sometimes some devices work with only one type of Wi-Fi technology. Remember your modem has 3 connection types.
- 2. Try connecting with an Ethernet cable instead.
- 3. Try using a different device to confirm the Internet is working.
- 4. Run your computer's internet troubleshooter if not able to connect.
- 5. Reposition your router/gateway to enhance your Wi-Fi range.
- 6. Contact the device manufacturer for further information and support.
- 7. GTEN support cannot help with third party device connection information.

#### What do I do when I can't access the Internet?

**Restart your device** by removing the power cord and waiting 30 seconds and plug it back in.

After the restart if your modem **NET and 4G** LED lights are lit, you are connected to the tower, you can now try your devices again. If you are still having trouble visit your modem's WEB interface page to confirm connection and check if your APN is correct.

If all are correct, your SIM may be blocked or suspended, please contact your ISP for help.

#### What do I do when the NET icon display is not lit?

**Restart your device** by removing the power cord and waiting 30 seconds and plug it back in.

After the restart if your modem **NET and 4G** LED lights are **NOT** lit, visit your modems WEB interface page to confirm connection and check if your APN is correct. If not visit the APN settings page and update your APN and reboot.

#### Why does the Signal Strength LED show only a few bars?

Some suggestions listed below:

#### This is most likely related to poor signal.

You could do something about some of the internal interference such as electronics, metal objects, or for that matter anything that sends magnetic or electronic signals and interferes with the cell waves. Therefore, get rid of any internal clutter as much as possible.

See to it that there aren't too many things standing between your modem and the cell tower – get a clear line of view, place modem on the second floor or third floor if you want to improve the signal. The reason is that the higher you go, there will be fewer obstructions in your vicinity (other houses, buildings, etc.). In this manner, you can regain lost signal in your house, or office building.

You may also want to try an external antenna setup to improve the quality of your service.

#### Why is the download or upload speed slow?

Slow speeds are most often caused by interference from other surrounding sources and transmitting devices in the vicinity. Solid metal objects or concrete walls also block LTE/5G radio waves, making for an even weaker signal which will result in slower speeds. Fixing this might be as simple as repositioning your router and changing the connection channel.

Another culprit of slower speeds might be your ISP plan, may plans come with usage restrictions or slow speeds during congested periods, check with your ISP for the latest plan details regarding your SIM and service.

#### Can I connect multiple LAN devices to the modem?

Your modem supports up to 32 devices over 2.4Ghz Wi-Fi, and 3 devices over Ethernet. If you need to connect more than 1 Ethernet device, you can also connect a Ethernet switch up to your modem to add an additional 200+ wired devices or wireless extenders.

#### What do I do if I forget my admin login password?

The simplest way to reset your admin password is by using a paper clip and hold down the RST button in the back of the device for 30 seconds. See Back Panel with Connectors, Buttons, and a Ports on Page 8 for the location of this reset button.

#### How do I disconnect from the mobile broadband network?

The simplest way to disconnect from the mobile broadband network is removing the power cord from the device, however if you want to keep the device on but kill the cellular connection then on the "ON/OFF" switch.



#### How do I find my computer's WAN IP address?

You can find this information on the main page under LTE Network Status

| LTE Network Status |            |    |  |
|--------------------|------------|----|--|
| Network Setting    | S          | >  |  |
| Signal Strength    | -95 dBm    |    |  |
| Signal Quality     | -8         |    |  |
| Channel            | 14         |    |  |
| Tower ID           | 54798123   |    |  |
| My IP              | 10.112.0.2 | 17 |  |
|                    |            |    |  |

#### Why can I not log into the Modem Web interface?

Some suggestions listed below:

This usually can be solved by **restarting the router**. Also make sure you are connected to the correct wireless network; it is best to use an Ethernet when connecting to the modem's Web Interface.

**Pro Tip:** While many Laptops and Tablets do not offer Ethernet ports this is easily fixed by obtaining an inexpensive USB or USB3 Ethernet adapter for your device.

#### Troubleshoot the Mobile Broadband Internet Connection?

Some suggestions listed below:

The very first recommendation is to power your device off (removing the power cord), wait 30 seconds and turn it on again. This usually fixes all connection issues. You may also:

- 1. Check that your SIM card is correctly inserted into your device.
- 2. Change your modem's location which can improve your signal.
- 3. Log into the modem's Web Interface to ensure the device is connected.
- 4. Ensure your APN is correctly spelled.
- 5. Make sure your modems' mobile broadband channels are set for the right carrier.

**Pro Tip:** If you have tried everything and nothing works, contact your Internet service provider immediately, do not **FACTORY RESET** the device as this will wipe out all of your modem's programming.

#### Can a Public Static Internet "IP" Address be used?

Some suggestions listed below:

YES, this is obtained from your service provider.

**Pro FYI:** Static IP means the IP address never changes if you stay with the same provider or same server. Dynamic means the IP address can change from time-to-time. Public means the IP address can be visited from any computer in the world. Private means the IP address can only be used by those on the same network.

### **Default Settings and Specifications** GTEN® BASIC MODEM 4R3/R2

Technical and Environmental Specifications Specifications:



• Weight: 1.2 lbs.

Radio Module Communication Information: Radio Manufacturer: ZTE Module Name: E8/E9 LTE Bands available for LTE: B2, B4, B5, B12, B13, B14, B17, B25, B26, B30, B41, B66. Band available for UMTS DC-HSPA 2:4:5 Carrier Aggregation supported: NO nr5G Technology supported: NO

Data sheet for this device can be found > https://gtenamerica.com/ltesheet.pdf

# Support

Thank you for purchasing this GTEN® product. You can visit www.gtenamerica.com/support to obtain more information about your product, get help, access the latest downloads and manuals. We recommend that you use only official GTEN® support resources.

### Compliance

For regulatory compliance information, visit <u>https://gtenamerica.com/gten-america-</u> <u>modem-history/</u>

See the regulatory compliance document before connecting the power supply.

### Trademarks

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### Warranty

#### GTEN® MODEMS PRODUCT LIMITED WARRANTY TERMS AND CONDITIONS

This GTEN® branded product, as supplied and distributed by Infinite Internet and delivered new, in the original carton to the original consumer purchaser, is warranted by GTEN® against manufacturing defects in materials and workmanship for a limited warranty period of:

• 1) 90 days from the date of purchase.

For additional warranty information visit <a href="https://infiniteic.com/gtenwarranty/">https://infiniteic.com/gtenwarranty/</a>

GTEN® AMERICA N.A. INC. 148 Vista Royale Blvd Vero Beach, FL, 32962 USA

### FCC Declaration of Conformance

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.

Changes or modifications not expressly approved by the party responsible for compliance could void the user 's authority to operate the equipment.

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.

Operations in the 5.850-5.895GHz band are restricted to indoor usage only.

### FCC RF Radiation Exposure Statement (SAR)

This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 35 centimeters between the radiator and your body.

### Safety Warnings

#### Adapter

Do not use any other power adapter except the one that accompanies this unit, or a power adapter identified in the list below.

Use of another adapter could result in damage to the unit.

The following power adapter is qualified for use with this GTEN® Modem: (specified the adapter specifications, brand, make, type, and other restrictions)

#### Caution

Ensure to connect the power cord of power adapter to a socket-outlet with grounding connection.

30

## Safety and Compliance

#### Read before Use

We recommend you read the following sections thoroughly before use. GTEN<sub>®</sub> America Inc. is not liable for malfunctions or damage resulting from misuse of the modem.

#### **Safety Precaution**

Please observe the following safety precautions.

Use the chargers, cables or accessories approved by the device manufacturer.

Do NOT disassemble or modify the device. Doing so will void the warranty.

Prevent wetness from penetrating internal parts. Using the device in wet or damp environment (for instance, charging it in a wet environment like bathtub or bathroom) may result in malfunctions.

Do NOT use this device near source of heat or fire, such as oven, microwave, stove, or heater. Keep your device away from cooking appliances.

Do NOT place the device in places with heated atmosphere (dryer, sauna, hot water).

Do NOT use the device and disconnect all cables at places with fire or explosion risks.

Avoid strong physical impact (heavy objects or excessive force).

Keep your device away from liquid or conductive materials.

Do NOT charge the device when either the device, the adapter, or the cable is wet. It may cause a short circuit.

Power off the device when near medical equipment or high-precision control systems to avoid potential interference.

Charge with specified voltage only.

Place the device on a flat, stable surface for optimal use.

Keep the device and adapter away from children and pets.

The device must be disposed of in accordance with the locally applicable. environmental regulations. Keep the device away from magnetic items such as magnetic strip cards or items that generate strong electronic or magnetic fields, such as a microwave.

Do NOT store the device in an overheated environment.

Do NOT use the device when it is overheated.

Disconnect all the cable connections when the device is not in use.

Place the device in places with good signal strength.

Make sure the adapter you use with the device meets the approved standards and specifications.

#### **Disposal and Recycling**

Do not dispose of the router in a household garbage bin.

Products with this label must be taken to specific collection points at the end of their life. You can learn more about how to recycle your mobile device by visiting the CTIA website at <u>www.ctia.org/news/how-to-recycle-your-mobile-device</u>

### Maintenance & Care

- Avoid extreme temperature or direct sunlight.
- Clean handset with soft, dry cloth. Do NOT use alcohol solvent (color may fade)
- The warranty does not cover malfunctions caused by misuse.
- Stop all the applications and shut down the device before cleaning it.
- Keep the device and its accessories always dry.
- If an anomaly occurs, contact your ISP support immediately.
- When storing the device, do NOT store it in a container with dampness or under extended heat.
- Avoid always dropping the device or strong physical impact.

### Legal Notices

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#### Changes

The functions of the product and associated peripherals or accessories are described in this document are based on the current hardware, software and/or local network conditions at the time of writing, and thus may vary due to conditions set by local network service providers or carriers. Therefore, all information described herein is subject to change without prior notice.