

Inseego FG2000

Inseego Wavemaker FG2000 5G Wi-Fi Router User Manual

Model: FG2000

1. INTRODUCTION

The Inseego Wavemaker FG2000 series indoor router is designed to provide high-speed internet access for homes and businesses, leveraging advanced 5G and 4G LTE technologies. This device offers a robust and secure Wi-Fi 6 connection, supporting up to 128 Wi-Fi devices simultaneously. It is equipped with features for enhanced security and flexible management, including support for private networks and dual SIM capabilities for optimized connectivity. This manual provides essential information for setting up, operating, and maintaining your FG2000 router.

2. SAFETY INFORMATION

Please read all safety instructions before using the device. Failure to follow these instructions may result in injury, damage to the device, or property damage.

- Do not expose the device to extreme temperatures, direct sunlight, or high humidity.
- Use only the power adapter supplied with the device.
- Do not open or attempt to repair the device yourself. Refer all servicing to qualified personnel.
- Keep the device away from water and other liquids.
- Ensure proper ventilation around the device to prevent overheating.
- Dispose of the device and its components responsibly according to local regulations.

3. PACKAGE CONTENTS

Please check the package contents to ensure all items are present:

- Inseego Wavemaker FG2000 5G Wi-Fi Router
- Power Adapter
- Ethernet Cable
- Quick Start Guide (not included in this manual)

4. PRODUCT OVERVIEW

4.1 Front View



Figure 4.1: Front view of the Inseego Wavemaker FG2000 router. The device features a minimalist white casing with the Inseego branding and an indicator light visible on the top surface.

4.2 Rear Panel and Ports

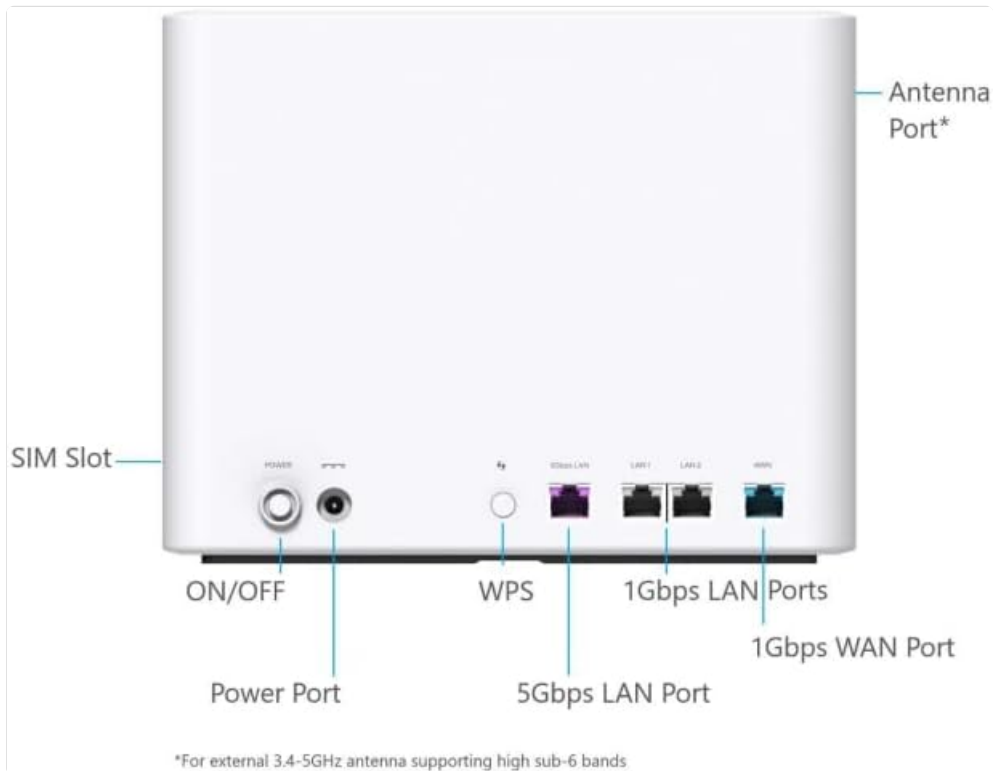


Figure 4.2: Rear panel of the Inseego Wavemaker FG2000 router, detailing its connectivity options.

- **SIM Slot:** Insert your 4FF Nano SIM card here for cellular connectivity. The FG2000e model supports dual SIMs.
- **ON/OFF Button:** Press to power the device on or off.
- **Power Port:** Connect the supplied power adapter to this port.
- **WPS Button:** Use for Wi-Fi Protected Setup to quickly connect compatible devices without entering the password.
- **5Gbps LAN Port:** A high-speed Ethernet port for connecting devices requiring faster wired connections.

- **1Gbps LAN Ports (LAN1, LAN2, LAN3):** Standard Gigabit Ethernet ports for connecting wired devices like computers, gaming consoles, or smart TVs.
- **1Gbps WAN Port:** Connect this port to an existing modem or network for internet access, or for initial setup and firmware upgrades.
- **Antenna Ports:** (Marked with an asterisk on the image) For external 3.4-5GHz antennas supporting high sub-6 bands.

5. SETUP GUIDE

1. **Insert SIM Card:** Locate the SIM slot on the rear panel. Carefully insert your 4FF Nano SIM card into the slot until it clicks into place. Ensure the SIM card is oriented correctly.
2. **Connect Power:** Connect the supplied power adapter to the Power Port on the rear of the router, then plug the adapter into a wall outlet.
3. **Power On:** Press the ON/OFF button on the rear panel. The router will begin its startup sequence. Wait for the indicator lights on the front to stabilize, indicating it's ready.
4. **Initial Connection:**
 - **Wi-Fi Connection:** On your computer or mobile device, search for available Wi-Fi networks. Select the network name (SSID) printed on the label on the bottom of your router. Enter the Wi-Fi password (WPA Key) also found on the label.
 - **Ethernet Connection:** Connect one end of the supplied Ethernet cable to a LAN port on the router and the other end to your computer's Ethernet port.
5. **Access Router Management:** Open a web browser and enter the router's default IP address (usually 192.168.1.1 or 192.168.0.1, refer to the label on your device for the exact address). Log in using the default username and password (also on the label).
6. **Configure Settings (Optional):** Use the web interface or the Inseego Mobile App to customize your Wi-Fi network name (SSID), password, security settings, and other advanced features. The Inseego Mobile App can also help optimize router placement for best signal.

6. OPERATING INSTRUCTIONS

6.1 Connecting Devices

- **Wi-Fi Devices:** The FG2000 supports Wi-Fi 6 and can connect up to 128 devices. Use the Wi-Fi network name and password to connect smartphones, tablets, laptops, and other wireless devices.
- **Wired Devices:** Use the 5Gbps LAN port or the three 1Gbps LAN ports to connect devices like desktop computers, smart TVs, or gaming consoles for stable, high-speed wired connections.

6.2 Network Management

- **Inseego Mobile App:** Download the Inseego Mobile App from your device's app store. This app allows you to easily manage settings, monitor data usage, and find the optimal placement for your router.
- **Web Interface:** For advanced configurations, access the router's web interface via a browser. Here you can manage security protocols (WPA3, AES 256 encryption), set up primary and guest networks, and configure VPN settings (Open VPN and IPsec VPN).
- **Inseego Connect Platform:** For managing multiple FG2000 devices, the Inseego Connect platform provides a centralized interface to monitor, configure, and troubleshoot your deployment.

6.3 Adaptive Connectivity

The FG2000e model offers dual SIM support, allowing for automatic switching between carriers based on signal strength, data usage, service availability, and quality.

7. MAINTENANCE

- **Cleaning:** Use a soft, dry cloth to clean the exterior of the router. Do not use liquid cleaners or aerosols.
- **Ventilation:** Ensure the router is placed in a well-ventilated area, away from direct heat sources, to prevent overheating. Do not block the ventilation openings.
- **Firmware Updates:** Periodically check for firmware updates through the router's web interface or the Inseego Mobile App. Keeping the firmware updated ensures optimal performance and security.
- **Restarting:** If you experience network issues, try restarting the router by unplugging the power adapter, waiting 10 seconds, and then plugging it back in.

8. TROUBLESHOOTING

Problem	Possible Cause	Solution
No Internet Connection	SIM card not inserted correctly or not activated; no cellular signal; WAN cable disconnected.	Ensure SIM is properly inserted and active. Check cellular signal strength via the app/web interface. Verify WAN cable connection if using. Restart the router.
Slow Wi-Fi Speed	Router placement; too many connected devices; interference from other devices.	Relocate the router to a central location. Reduce the number of active devices. Change Wi-Fi channel in settings.
Cannot Access Router Web Interface	Incorrect IP address; device not connected to router; browser issues.	Verify the router's IP address. Ensure your device is connected to the router's Wi-Fi or LAN. Try a different browser or clear browser cache.
Wi-Fi Disconnects Frequently	Signal interference; outdated firmware; router overheating.	Check for sources of interference. Update router firmware. Ensure proper ventilation.

9. SPECIFICATIONS

Below are the technical specifications for the Inseego Wavemaker FG2000 5G Wi-Fi Router.

Product Specifications		
Device		
Name:	5G Indoor Router	
Model:	FG2000-3 FG2000-4	
Regulatory:	FG2000-3	FCC, ISED, CE, UKCA, RCM, RSM, CITC, CITRA, TRA UAE, TRA Bahrain
	FG2000-4	MIC
Standards, Approvals, Certifications:	GCF, PTCRB Wi-Fi Alliance REACH, RoHS, WEEE	
Dimensions:	9" x 3" x 6.8" (230 mm x 76 mm x 172.5 mm)	
Weight:	59 oz (1675 g)	
Ports:	3x LAN 5/ 1/ 1 Gbps 1x WAN 1 Gbps 1x External Antenna (1x2 TS-9)	
SIM:	4FF Nano SIM	
Chipset:	Qualcomm® Snapdragon™ SDX55	
LED:	Status	
Environmental		
Operating Temperature:	0° C to 45° C (32° F to 113° F)	
Storage Temperature:	-30° C to +70° C (-22°F to 158° F)	
Network Connectivity†		
5G Sub-6 GHz		
4G LTE Cat 22		
4x4 MIMO sub-6 GHz		
HSPA+/UMTS		
CBRS		
256 QAM sub-6 GHz		

Figure 9.1: Visual representation of the Inseego Wavemaker FG2000 series product specifications.

Feature	Detail
Model Name	FG2000
Dimensions (L x W x H)	9 x 3 x 7 inches (228.6 x 76.2 x 177.8 mm)
Weight	5.99 pounds (2.72 kg)
Connectivity Technology	Wi-Fi, 5G, 4G LTE
Wireless Communication Standard	802.11ax (Wi-Fi 6)
Frequency Band Class	Quad-Band
Max Connected Devices	Up to 128 Wi-Fi devices
Ethernet Ports	1x 5Gbps LAN, 3x 1Gbps LAN, 1x 1Gbps WAN
SIM Type	4FF Nano SIM (Dual SIM support on FG2000e)
Operating System	X55 5G Modem-RF System
Security Protocol	Wi-Fi security (WPA/WPA2/WPA3), AES 256 encryption, Open VPN, IPsec VPN
Special Feature	WPS (Wi-Fi Protected Setup)

Feature	Detail
Compatible Devices	iPhone, Samsung, and other Wi-Fi enabled devices
Recommended Uses	Home and Business Internet, Security

10. WARRANTY AND SUPPORT

For information regarding product warranty, please refer to the warranty card included with your purchase or visit the official Inseego website.





If you encounter any issues or require technical assistance, please contact Inseego Customer Support through their official website or the contact information provided in your product documentation.




- **Online Support:** Visit the Inseego support portal for FAQs, troubleshooting guides, and software downloads.
- **Contact Information:** Refer to your product packaging or the Inseego website for phone numbers and email support options.



© 2024 Inseego Corp. All rights reserved. Inseego and Wavemaker are trademarks of Inseego Corp.

Related Documents - FG2000

	<p>Inseego 5G FG2000 Indoor Router Quick Start Guide</p> <p>This guide provides instructions for setting up, connecting, and configuring your Inseego 5G FG2000 Indoor Router. Learn about the front and back views, LED indicators, setting up the device, connecting wireless devices, customizing settings, and restoring factory settings.</p>
	<p>Inseego Wavemaker FX2000 FG2000 S2000e Antenna Port Guide</p> <p>A comprehensive guide to the antenna ports and connectivity options for Inseego Wavemaker FX2000, FG2000, and S2000e cellular routers, including details on MIMO antenna kits and frequency band specifications.</p>
	<p>Inseego Wavemaker X700 Mesh Wi-Fi Quick Start Guide</p> <p>A quick start guide for setting up and managing the Inseego Wavemaker X700 Mesh Wi-Fi system, including pairing instructions, LED indicator meanings, and connecting wireless devices.</p>
	<p>Inseego Wavemaker FX4100 5G Cellular Router Quick Start Guide</p> <p>A quick start guide for the Inseego Wavemaker FX4100 5G Cellular Router, covering setup, location, connecting devices, using the display, monitoring, and factory reset.</p>

<div><div>Inseego Wavemaker™ FX4100 Cellular Router Quick Start Guide</div><div></div></div>	<div>Inseego Wavemaker FX4100 Cellular Router Quick Start Guide</div> <div>A quick start guide for setting up and connecting to the Inseego Wavemaker FX4100 Cellular Router, including LED indicators, device display navigation, and management options.</div>
<div><div>User Guide</div><div></div><div><div>Inseego Wavemaker™ FX4100 5G Cellular Router</div><div></div></div></div>	<div>Inseego Wavemaker FX4100 5G Cellular Router User Guide</div> <div>Comprehensive user guide for the Inseego Wavemaker FX4100 5G Cellular Router, covering setup, features, configuration, troubleshooting, and product specifications. Learn how to connect devices, manage network settings, and optimize performance.</div>