Manuals+ — User Manuals Simplified.

FORTINET FortiWiFi 50G DSL Network Security Gateway User Guide

FERTINET®

Quick Start Guide
FortiWiFi 50G DSL
FWF-50G-DSL

Contents

The Essentials

FortiCare
Register your device to activate FortiCare Support at **https://support.fortinet.com**

WiFi

1. Connect to the default fortinet wireless network
2. Open a browser to **https://192.168.1.99**

LAN

1. Connect Port 1 to an Ethernet port or USB-RJ45 adapter on your computer using the provided Ethernet cable

2. Open a browser to **https://192.168.1.99**

CLI

1. Connect a console cable (not included) to the Console Port
2. Open a Terminal app using 9600-8-N-1

Default Logins

OS	**https://192.168.1.99** Username: admin Password: leave blank	FortiWiFi	SSID: fortinet Password: fortinet

Fortinet Documents Library
For getting started documentation, admin guides, up-to-date hardware manuals and reference resources, visit
https://docs.fortinet.com/

FortiGate Cloud
Experience simplified cloud provisioning, security analytics, remote access, hosted log retention and reporting at
https://fortigate.forticloud.com

FortiExplorer Go
Rapidly provision, deploy and manage your Fortinet Security Fabric Platform, free on iOS and Android:
https://docs.fortinet.com/product/fortiexplorer-go/

GET IT ON Google Play   Download on the App Store

Package Contents

FortiWiFi 50G DSL
FWF-50G-DSL

1x FortiWiFi Device

1x QuickStart Guide

3x AC Adapter Plugs
(US, EU, UK)

1x DC Power Adapter

1x Ethernet Cable

3x Antennas

1x DSL Cable

Setup

 FortiExplorer Go
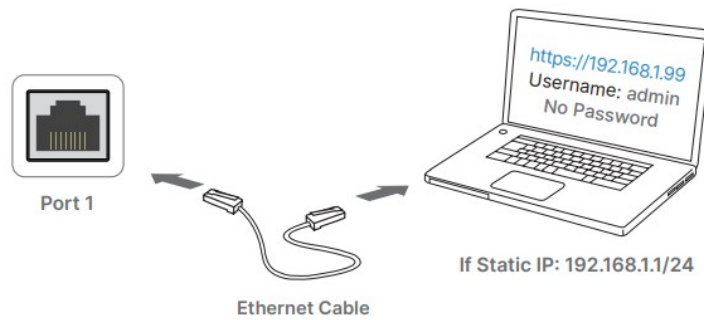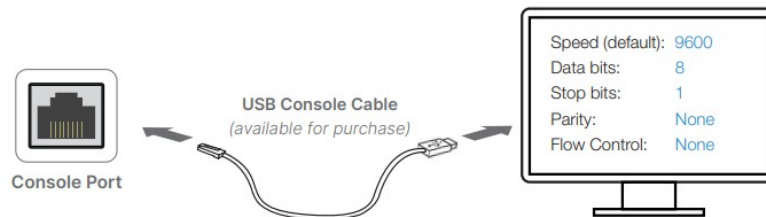
Install
FortiExplorer Go

Enable
Bluetooth

Follow the on-screen
instructions

GUI

Port 1

Ethernet Cable

https://192.168.1.99
Username: admin
No Password

If Static IP: 192.168.1.1/24

CLI

Console Port

USB Console Cable
(available for purchase)

Speed (default):	9600
Data bits:	8
Stop bits:	1
Parity:	None
Flow Control:	None

FortiGate Cloud
Flow Control: None
Login to **https://fortigate.forticloud.com** using your Fortinet Credentials, then click Add FortiGate and enter the Cloudkey

WAN port

Ethernet Cable
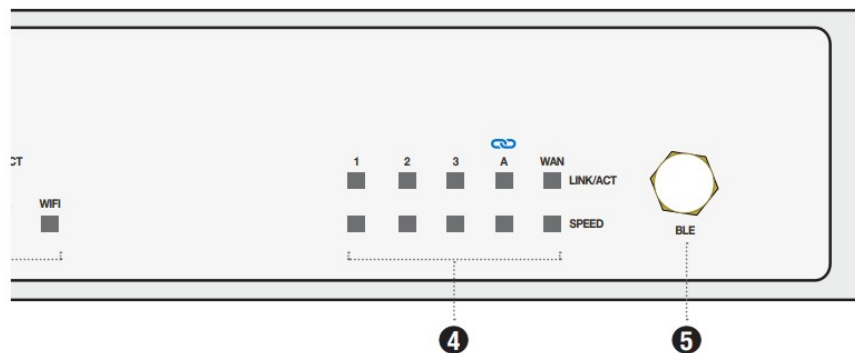
Internet
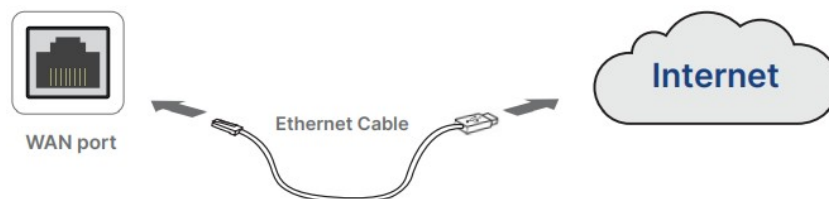
Front FWF-50G-DSL
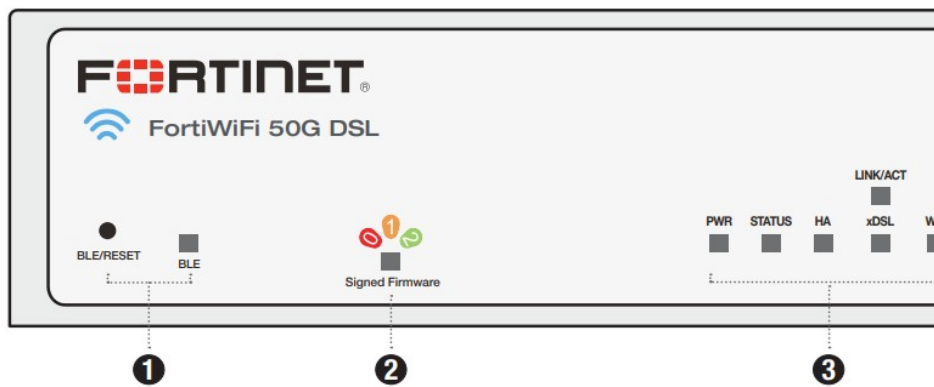
1. BLE / RESET Press to enable BLE; press and hold for system reset
   - ■ Blue: BLE connected
   - ◪ Flashing Blue: BLE in discovery
   - ■ Off: BLE not connected
2. Signed Firmware BIOS Security Level

   Controlled by Signed Firmware Switch, see Admin Guide at https://docs.fortinet.com
   - ■ Green: Security Level 2 (default)
   - ■ Amber: Security Level 1
   - ■ Red: Security Level 0

3. **PWR**
   - ■ Green: Power detected
   - ■ Off: Power not detected

   LINK/ACT
   - ■ Green: DSL connected
   - ◪ Flashing Green: DSL activity
   - ■ Off: DSL not connected

   STATUS
   - ■ Green: Operating normally
   - ◪ Flashing Green: Booting up
   - ■ Off: Device is off

   xDSL
   - ■ Green: VDSL connection
   - ■ Amber: ADSL connection
   - ■ Off: No DSL connection

   HA
   - ■ Green: HA enabled (normal)
   - ■ Amber: HA enabled (failover)

■ Off: HA disabled

WIFI

■ Green: WiFiis on

◩ Flashing Green: WiFi activity

■ Off: WiFi is off

4. **Ports**

LINK/ACT

■ Green: Connected

◩ Flashing Green: Data activity

■ Off: Not connected

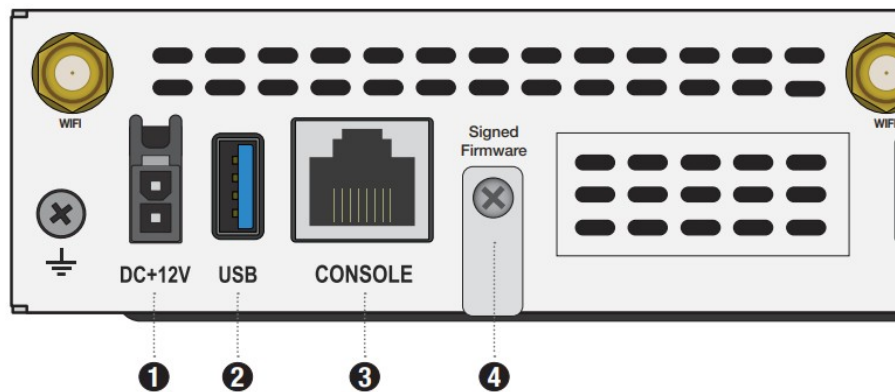**SPEED**

■ Green: 1 Gbps

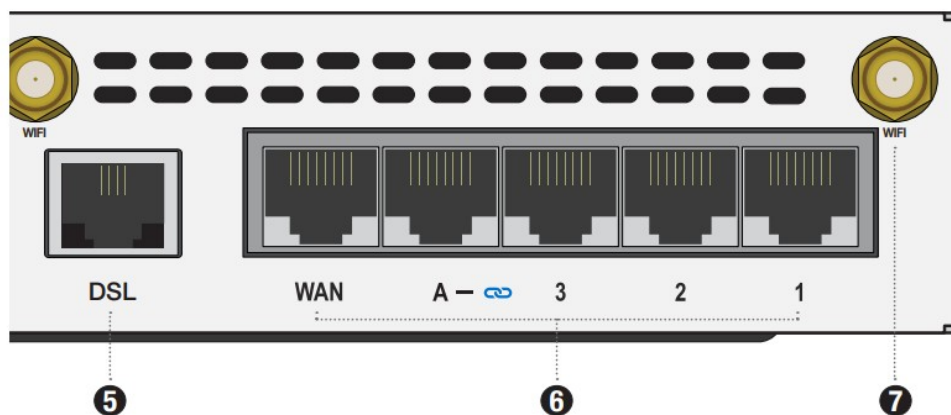■ Amber: 100 Mbps

■ Off: 10 Mbps or not connected

Rear FWF-50G-DSL

1. Power Input 12V DC, 100-240V AC, 50/60Hz adapter
2. USB 3.0 Port (USB-A)
3. CONSOLE Port (RJ-45) CLI management
4. Signed Firmware Switch

5. DSLPort (RU-11)
6. Ports (5x RJ-45) WAN, A – FortiLink, 3, 2,1
7. Antenna Connector (3x SMA)

Cautions and Warnings

Environmental specifications

Ambient operating temperature: O°C to 40°C
Refer to specific Product Model Data Sheet for Environmental Specifications (Operating Temperature, Storage Temperature, Humidity, and Altitude)

Safety

Battery – Risk of explosion if the battery is replaced by an incorrect type. Do not dispose of batteries in a fire. They may explode. Dispose of used batteries according to your local regulations. IMPORTANT: Switzerland: Annex 4.10 of SR814.013 applies to batteries.

This product is intended to be supplied by a Listed pluggable A via Class | external power supply adapter by means of a power cord connected to a socket-outlet with earthing connection.

Grounding — To prevent damage to your equipment, connections that enter from outside the building should pass through a lightning / surge protector, and be properly grounded. Use an electrostatic discharge workstation (ESD) and/or wear an anti-static wrist strap while you work. In addition to the grounding terminal of the plug, on the back panel, there is another, separate terminal for earthing.

This product has a separate protective earthing terminal provided on the back of the product in addition to the grounding terminal of the attachment plug. This separate protective earthing terminal must be permanently connected to earth with a green with yellow stripe conductor minimum size #

22AWG and the connection is to be installed by a qualified service personnel.

Warning: Equipment intended for installation in Restricted Access Location.

Disconnect ES2 (TNV) circuit connector before removing cover.

IMPORTANT SAFETY INSTRUCTIONS – When using your telephone equipment, basic safety precautions should always be followed to reduce the risk of fire, electric shock and injury to persons, including the following:

- Do not use this product near water for example, near a bathtub, washbowl, kitchen sink or laundry tub, in a wet basement or near a swimming pool.
- Avoid using a telephone (other than a cordless type) during an electrical storm. There may be a remote risk of electric shock from lightning.
- Do not use the telephone to report a gas leak in the vicinity of the leak.
- Use only the power cord and batteries indicated in this manual. Do not dispose of batteries in a fire. They may explode. Check with local codes for possible special disposal instructions.

SAVE THESE INSTRUCTIONS
CAUTION: To reduce the risk of fire, use only No. 26 AWG or larger (e.g., 24 AWG) UL Listed or CSA Certified Telecommunication Line Cord

Regulatory Notices

Federal Communication Commission (FCC) – USA
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 equipment has been tested and found to comply with the limits for a Ciass B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in residential installation. This equipment generates, uses, and can radiate radio frequency energy, and if it is not installed and used in accordance with the instruction manual, it 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.

WARNING: Any changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and Operated with minimum distance 20cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

This device meets all the other requirements specified in Part 15E, Section 15.407 of the FCC Rules.

This equipment complies with ANSI TIAVEIA/968-B and Part 68 of the FCC rules and the requirements adopted by the ACTA. On the base of this equipment is a label that contains, among other information, a product identifier in the format US: AAAEGHH#NOOX. If requested, this number must be provided to the telephone company.

This equipment uses the following USOC jacks: RJ11.

A plug and jack used to connect this equipment to the premises wiring and telephone network must comply with the applicable FCC Part 68 rules and requirements adopted by the ACTA. A compliant telephone cord and modular plug is provided with this product. It is designed to be connected to a compatible modular jack that is also compliant. See installation instructions for details.

The REN is used to determine the number of devices that may be connected to a telephone line. Excessive RENs on a telephone line may result in the devices not ringing in response to an incoming call. In most but not all areas, the sum of RENs should not exceed five (5.0). To be certain of the number of devices that may be connected to a line, as determined by the total REN, contact the local telephone company. The REN for this product is separately shown on the label and also part of the product identifier that has the format US: AAAEQ##TOOX. The digits represented by ## are the REN without a decimal point (e.g., 03 is a REN of 0.3).

If you experience trouble with this equipment, for repair or warranty information, please refer to Fortinet''s End-User License Agreement which set forth the terms and limitation of Fortinet's product warranty and contact the following address and phone number for additional information.

Fortinet, Inc.

899 Kifer Road, Sunnyvale, CA 94086 USA

1-**866-393-9960** (US and Canada)

1-**613-725-2466** (International

http://www.fortinet.com

It is recommended that the customer install an AC surge arrester in the AC outlet to which this device is connected. This is to avoid damaging the equipment caused by local lightning strikes and other electrical surges.

This equipment may not be used on coin service provided by the telephone company. Connection to party line service is subject to state tariffs.

Innovation, Science and Economic Development (ISED) – Canada

This Ciass B digital apparatus complies with Canadian ICES-003.

This device contains licence-exempt transmitter(s/receiver(s) that compty with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

For product available in the USA/Canada market, only channel 1~11 can be operated. Selection of other channets is not possible.

This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

The maximum antenna gain permitted for devices in the band 5725-5850 MHz shall be such that the equipment still complies with the e.i.r.p. limits Specified for point-to-point and non-point-to-point operation as appropriate.

The maximum antenna gain permitted for devices in the bands 5250-5350 MHz and 5470-5725 MHz shall comply with the e.i.r.p. limit; and

The worst-case tilt angle(s) necessary to remain compliant with the e.i.rp. elevation mask requirement set forth in Section 6.2.2(3) shall be clearly indicated.

Caution: The device for the band 5150-5250 MHz is only for indoor usage to reduce potential for harmful interference to co-channel mobile satellite systems.

Caution: The maximum antenna gain permitted for devices in the bands 5250-5350 MHz and 5470-5725 MHz shall comply with the e.i.rp. limit; and the maximum antenna gain permitted for devices in the band 5725-5825 MHz shall comply with the e.i.p. limits specified for point-to-point and non point-to-point operation as appropriate.

This radio transmitter (IC: 7280B-3901M12 / Model: FWF-50G-DSL) has been approved by ISED to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

This device and it's antennas{s) must not be co-located or operating in conjunction with any other antenna or transmitter except in accordance with IC multi-transmitter product procedures.

Antenna No.	Manufacturer	Model	Antenna Type	Connector	Antenna Peak Gain
1	Speed	F-OQ-FS-6156-001-00	Dipole	SMA	0.31 dBi for 2.4GHz(WLAN) 2.54 dBi for 5GHz
2	Speed	F-OQ-FS-6156-001-00	Dipole	SMA	0.31 dBi for 2.4GHz(WLAN) 2.54 dBi for 5GHz
3	Speed	F-OQ-FS-6156-001 -00	Dipole	SMA	0.31 dBi for 2.4GHz(WLAN) 2.54 dBi for 5GHz
4	Joymax	IHF-2120MPX9-W018	Monopole	iPex MHF1	1.53 dBi for 2.4GHz(BLE)

IMPORTANT: The device must be professionally installed and must use the supplied antenna.
Professional Installation Instruction

1. Installation personnel

   This product is designed for specific application and needs to be installed by qualified personnel who has RF and related rule knowledge. The general user shall not attempt to install or change the settings.

2. Installation location

   The product shall be installed at a location where the radiating antenna can be kept 20cm from nearby person in normal operation condition to meet Regulatory RF exposure requirement. The installation applies to indoor location.

3. External antenna(s)

   Use only the antenna(s) that have been approved by the manufacturer. The non-approved antenna(s) may produce unwanted spurious or exces- sive RF transmitting power that may lead to the violation of FCC/ISED limit and is prohibited.

4. Warning

   Please carefully select the installation position and ensure that the final output power does not exceed the limit

set forth in relevant rules. The violation of the rule could lead to serious federal penalty.

NOTICE: This product meets the applicable Industry Canada terminal technical specifications. This is confirmed by the registration number. The abbreviation, IC, before the registration number signifies that registration was performed based on a Declaration of Conformity indicating that Industry Canada technical specifications were met. It does not guarantee the equipment will operate to the user's satisfaction.

NOTICE: The Ringer Equivalence Number (REN) for this terminal equipment is 0.1. The REN assigned to each terminal equipment provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the Ringer Equivalence Numbers of all the devices does not exceed five.

European Conformity (CE) – EU

This is a Class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

$$C\ \epsilon$$

This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

Simplified EU Declaration of Conformity

This declaration is only valid for Fortinet products (including combinations of software, firmware and hardware) provided by Fortinet or Fortinet's authorized partners to the end-customer directly for use within the EU or countries that have implemented the EU Directives and/or spectrum regulation. Any Fortinet products not obtained directly from Fortinet or Fortinet's authorized partners may not comply with EU Directives and Fortinet makes no assurances for such products.

This product is in compliance with Directive 2014/53/EU.

Note: The full Declaration of Conformity for this product is available in the link below: **https://site.fortinet.com/ProductRegulatory/EU**

The device is restricted to indoor use only when operating in the 5150 to 53850 MHz frequency range in the following countries:

	AT	BE	BG	HR	CY	CZ	DK
	EE	FI	FR	DE	EL	HU	IE
	IT	LV	LT	LU	MT	NL	PL
	PT	RO	SK	SI	ES	SE	UK (NI)

Compliance with 2014/53/EU Radio Equipment Directive (RED)

In accordance with Article 10.8(a) and 10.8(b) of the RED, the following table provides information on the frequency bands used and the maximum RF transmit power of the product for sale in the EU:

STANDARD	FREQUENCY RANGE	TRANSMIT POWER
Bluetooth	2402-2480MHz	Less than 10dBm (EIRP)
WLAN	2412-2472MHz	Less than 20dBm (EIRP)
	5180-5240MHz	Less than 23dBm (EIRP)
	5260-5320MHz	Less than 23dBm (EIRP) *
	5500-5700MHz	Less than 30dBm (EIRP) *
	5745-5825MHz	Less than 14dBm (EIRP)

Note: * Only with DFS bands certification

UK Conformity Assessed (UKCA) – United Kingdom

The product transmits within the frequency ranges and less than or equal to the power listed below:

STANDARD	FREQUENCY RANGE	TRANSMIT POWER
Bluetooth	2402-2480MHz	Less than 10dBm (EIRP)
WLAN	2412-2472MHz	Less than 20dBm (EIRP)
	5180-5240MHz	Less than 23dBm (EIRP)
	5260-5320MHz	Less than 23dBm (EIRP) *
	5500-5700MHz	Less than 30dBm (EIRP) *
	5745-5825MHz	Less than 14dBm (EIRP)

Note: * Only with DFS bands certification

This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This product is in compliance with Statutory Instrument 1206 Radio Equipment Regulations 2017

The full Declaration of Conformity for this product is available in the link below:

https://site.fortinet.com/ProductRegulatory/UK

The device is restricted to indoor use only when operating in the 5150 to 5350 MHz frequency range in the following countries:

	UK

April 30, 2024

FWF-50G-DSL-QSG-20240430

FWF-50G-DSL-QSG-20240430.indd 16

4/30/2024 2:34:22 PM

Documents / Resources

FORTINET FortiWiFi 50G DSL Network Security Gateway [pdf] User Guide
TVE-3901M12, TVE3901M12, 3901m12, FortiWiFi 50G DSL Network Security Gateway, FortiW
iFi 50G DSL, FortiWiFi, FortiWiFi 50G, 50G DSL, Network Security Gateway

References

- **User Manual**