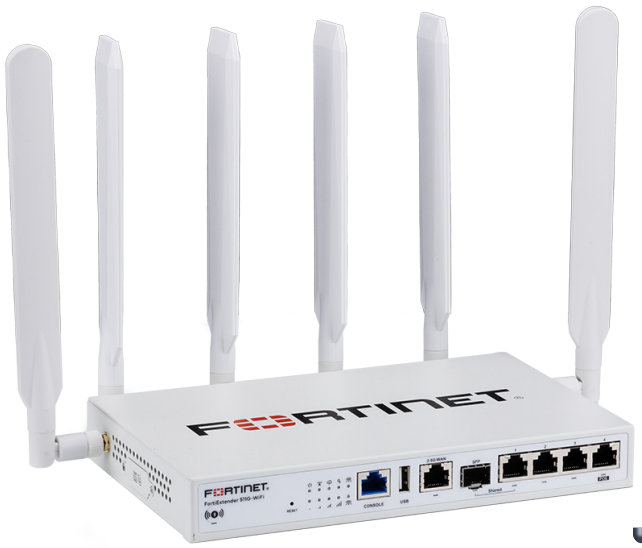
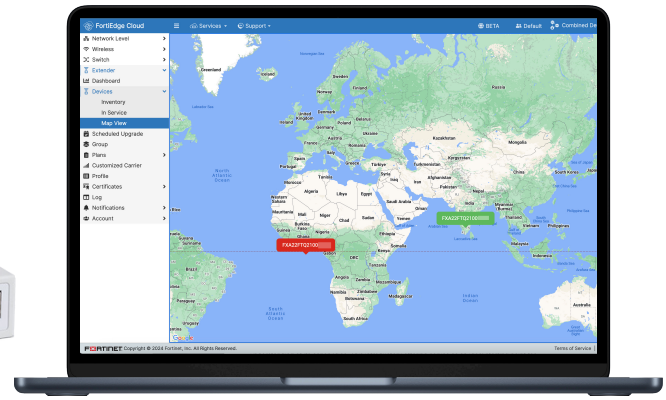
FortiExtender 5G/LTE Gateways

Available in

Appliance





Extend, Ensure, and Secure Your Network

FortiExtender indoor 5G/LTE gateways offer scalable, secure, and resilient connectivity for enterprise networks. Driven by Fortinet's unique approach of Secure Networking, FortiExtender allows organizations business continuity, improved network availability while securing connectivity with wired broadband and cellular networks.

From secure point of sale (POS) systems, to factories, healthcare facilities, microbranches, and kiosks—FortiExtender provides reliable broadband access to the internet and extends the value of the Fortinet Security Fabric to support fluid business operations dependent on remote device connectivity.

Highlights

- Improves network uptime
- Extends the network edge
- Provides out of band management (OOB)
- Integrates with Fortinet Secure SD-WAN
- Enables network fabrics with VxLAN extension
- Cloud management and on-premises management options
- Rich interface for multiple LAN and WAN connections
- Small form-factor for easy deployment and optimal cellular signal

Hardware and Interfaces

FortiExtender WAN 50G (FEW-50G)

FortiExtender WAN 50G (FEW-50G) is an ultra-fast 5G gateway adding high-speed, low-cost 5G/LTE WAN connections for the AI-enabled edge.

FEW-50G can be wall or desk mounted at a site where it has optimal 5G/LTE signals. A modest form-factor with 8x internal 5G/LTE omni-directional antennas, and 1x GNSS antenna, make FortiExtender WAN an optimal choice for discreet or space-constrained deployments.

FortiExtender WAN 50G alsp provides 2× 5GE ports enabling high-speed wireless throughput to the FortiGate NGFW.

Built for low-latency and high throughput at the AI-enabled edge, FortiExtender WAN 50G provides 7Gbps Downlink via 2x physical SIM and 1x eSIM.

Get OOB via Console or USB port, and add hardware redundancy to FortiGate through VRRP support.

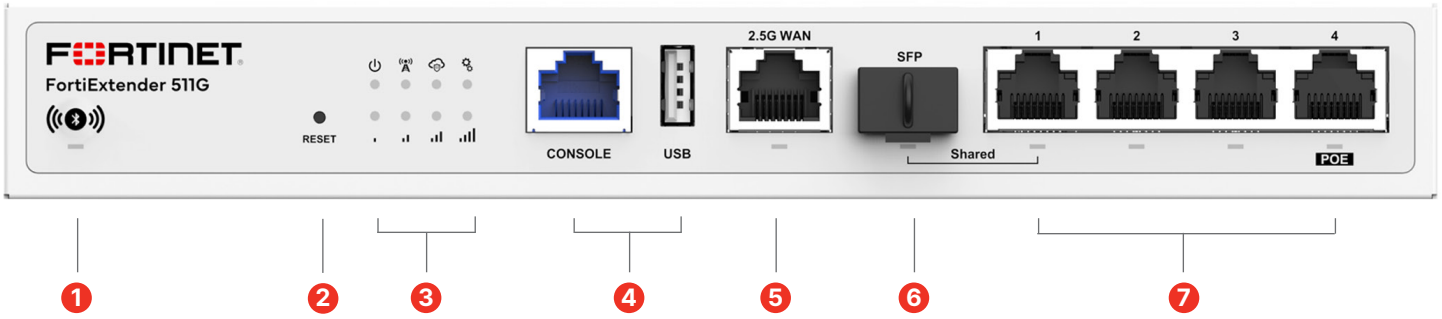
Interfaces

1. SIM Card1 and SIM Card2
2. Bluetooth Button and LED
3. 1x USB 2.0 Port
4. 1x Console Port (RJ45)
5. 2x GE RJ45 LAN Ports
6. Device Locking Screw Hole
7. Reset/Default
8. 12VDC/2A Input Socket

Hardware and Interfaces

FortiExtender 511G

The FortiExtender 511G Interface offers an SFP port for fiber cabling deployments greater than 100 meters away from the FortiGate or network switch, as well as console and USB 2.0 ports for out of band management (OOB).

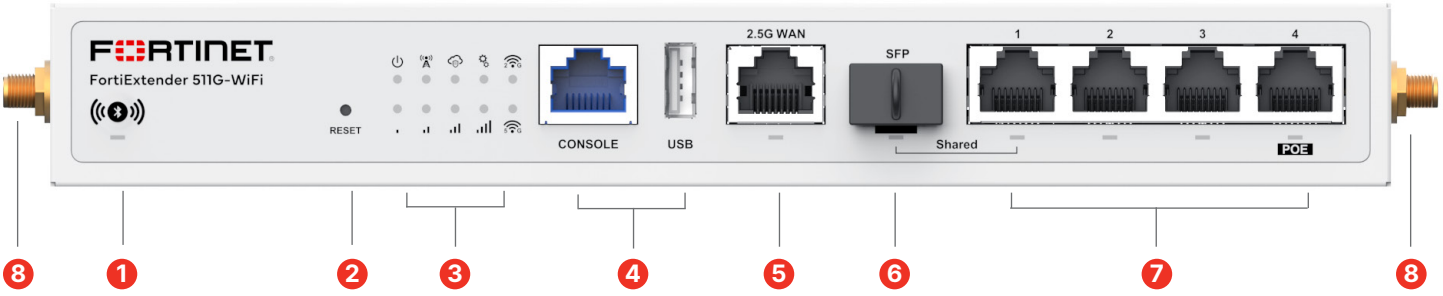


Interfaces

1. BLE
2. RESET
3. LED Status
4. 1x Console Port (RJ45) CLI Management
   1x USB 2.0 Port (USB-A)
5. 1× 2.5 G WAN Port (RJ45)
6. 1x SFP Port
7. 4x RJ45 Ports

FortiExtender 511G-WiFi

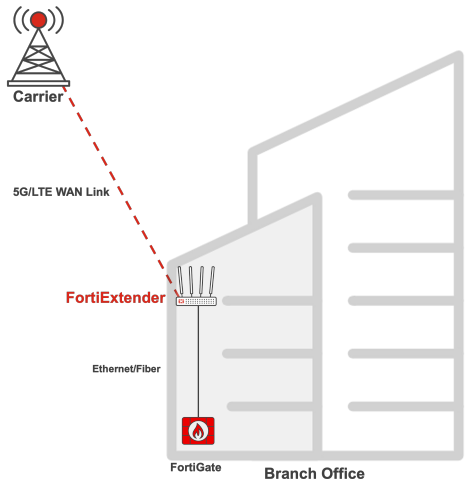
The FortiExtender 511G-Wi-Fi Interface offers an SFP port for fiber cabling deployments greater than 100 meters away from the FortiGate or network switch, as well as console and USB 2.0 ports for out of band management (OOB).



Interfaces

1. BLE
2. RESET
3. LED Status
4. 1x Console Port (RJ45) CLI Management
   1x USB 2.0 Port (USB-A)
5. 1× 2.5 G WAN Port (RJ45)
6. 1x SFP Port
7. 4x RJ45 Ports
8. 2x Wi-Fi Antenna Connectors (RP-SMA)

Features

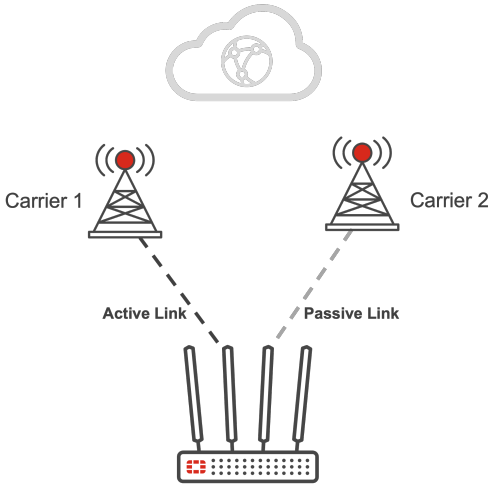


Superior Management, Security, and Control

FortiExtender is a plug-and-play device. Once connected to a FortiGate, either directly or remotely over VxLAN, FortiExtender appears as a regular network interface in FortiOS management. IT administrators can manage the connection and implement advanced protection from FortiGuard, just like any other FortiGate interface.

Flexible Deployment for Optimal Signal Strength

FortiExtender devices removed the need for lengthy, expensive, and lossy antenna cables. FortiExtender utilizes Power over Ethernet (PoE) so you can run a high-quality Ethernet cable up to 100 meters away from the FortiGate or network switch where there is optimal 5G/LTE signal. Certain FortiExtender models also support SFP ports, so that you can deploy the device over 100 meters away from the FortiGate or network switch.



5G/LTE Wireless WAN

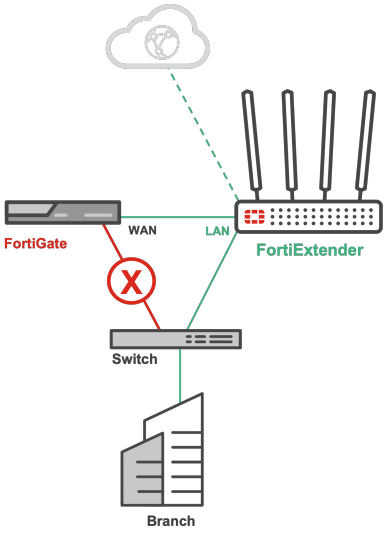
FortiExtender supports dual-SIM and dual-modem options, enabling up to four different ISPs for ultra-reliable connectivity. Dual-SIM models enable active/passive cellular for failover based on data plan, disconnects, signal strength, and link health, allowing you to balance connectivity quality and cost. Dual-Modem provides active/active cellular links for high-availability, traffic isolation, and load-balancing use cases. Failover configuration options for Dual-SIM FortiExtender include.

Wired WAN Connectivity

FortiExtender offers WAN connectivity options with an Ethernet WAN port, in addition to 5G/LTE Wireless WAN links. With this wired WAN port, you can connect a DSL, cable, or another modem for additional WAN connectivity. Load-balancing and failover options enable your FortiExtender to manage your WAN connections across several options to ensure optimal connectivity and cost.

LAN Connectivity

FortiExtender offers multiple LAN Ethernet ports to enable multiple connections at the Wireless WAN site. Ideal for High Availability (HA) pairs of FortiGates, each FortiGate can be directly connected to the FortiExtender. Either FortiGate can run in load-balancing or failover modes and receive WAN connectivity from the FortiExtender.



LAN Extension

You don't need a FortiGate on site to deploy AI-powered security with your FortiExtender. Enhanced LAN Extension in FortiExtender creates a network fabric using VxLAN technology where you can extend the Layer 2 broadcast domain of a remote FortiGate to the standalone FortiExtender with no extra license needed. Depending on the FortiGate model*, Enhanced LAN Extension supports over 1,000 FortiExtenders per firewall.

*Contact your Sales Engineer for specific details.

Virtual Routing Redundancy Protocol (VRRP)

In branch environments where a high-availability (HA) pair of FortiGates is not possible, FortiExtender supports VRRP to offer HA alongside a single FortiGate. When plugged into a FortiGate, FortiExtender acts as a passive IP passthrough device to the FortiGate. In the event of a FortiGate failure, FortiExtender will take over as the master NAT firewall, offering uninterrupted connectivity for enhanced business continuity. When the FortiGate is restored, FortiExtender returns to its passive role.

Private 5G/LTE

All FortiExtender 5G/LTE models support CBRS in either the form of LTE Band 48 or 5G N48. This allows FortiExtender to play a critical role in Private 5G/LTE deployments as a rapid secure uplink at the edge. When equipped with a Private 5G/LTE SIM card, FortiExtenders can also receive CBRS signal from Private 5G/LTE Access Points to deployed on Automated Guided Vehicles (AGVs), Autonomous Mobile Robots (AMRs), or as virtual LAN mobile zones in parking lots, pop-up tents, and more.

Hardware Specifications

	FEX-101G	FEX-200F	FEX-201F-EA	FEX-202F-AM
Hardware and System				
Modem Support	Internal (1x Modem) LTE CAT-6	N/A	Internal (1x Modem)	Internal (2x Modem)
Number of Antennas	3 SMA External (2x LTE + 1x GNSS)	N/A	3 SMA External	6 SMA External
Power over Ethernet (PoE) Powered	1x Port4, IEEE 802.3at (25.5W)	N/A	IEEE 802.3af (15.4 W)	IEEE 802.3af (15.4 W)
Ethernet Ports	1× 1GigE WAN, 4× 1GigE LAN	5 GbE RJ45 ports (WAN or LAN configurable)	5 GE RJ45 Ports (WAN + LAN)	5 GE RJ45 Ports (WAN + LAN)
USB Ports	1x USB 2.0 Type-A	1 x USB 2.0 Type A	1 x USB 2.0 Type A	1 x USB 2.0 Type A
Bluetooth	BLE 5.0+	Maximum Transmit Power 10 dBm Frequency 2.4 GHz	Maximum Transmit Power 10 dBm Frequency 2.4 GHz	Maximum Transmit Power 10 dBm Frequency 2.4 GHz
GPS Antenna Port	✓	N/A	✓	✓
Mounting Options	Wall-Mount / Desktop	Wall Mount / Desktop	Wall Mount / Desktop	Wall Mount/Desktop
Type	Indoor	Indoor	Indoor	Indoor
Dimensions				
Height x Width x Length (inches)	1.5 × 6.22 × 6.22 (not including antenna length)	1.02 × 7.09 × 3.9	1.5 × 5.9 × 5.9 (not including antenna length)	1.5 × 6.22 × 6.22 (not including antenna length)
Height x Width x Length (mm)	38 × 158 × 158 (not including antenna length)	27 × 180 × 99.9	38 × 150 × 150 (not including antenna length)	38 × 158 × 158 (not including antenna length)
Weight	0.90 lbs (0.41 Kg)	1.01 lbs (0.46 kg)	0.81 lbs (0.37 kg)	0.90 lbs (0.41 kg)
Environment				
Power Required	PoE 802.3af/at or 12V/3A External Adapter	12V/1A External Adapter	12V/3A	12V/3A External Adapter/PoE (af/at)
Power Consumption (Average)	9.10 W		6.5 W	7.55 W
Power Consumption (Maximum)	10.45 W	6.19 W (21.12 BTU/hr) @ -5C 6.81 W (23.24 BTU/hr) @ 50C	8.5 W	9.40 W
Operating Temperature	32°F to 104°F (0°C to 40°C)	32°F to 104°F (0°C to 40°C)	32°F to 104°F (0°C to 40°C)	32°F to 104°F (0°C to 40°C)
Storage Temperature	-40°F to 158°F (-40°C to 70°C)	-4°F to 158°F (-20°C to 70°C)	-4°F to 158°F (-20°C to 70°C)	-4°F to 158°F (-20°C to 70°C)
Humidity	5% to 95%	5% to 95%	5% to 95%	5% to 95%
Certifications				
FCC	FCC Part 15B, 15C, 2.1091	FCC Part 15B, 15C, 2.1091	FCC Part 15B, 2.1091*	FCC Part 15B, 15C, 2.1091*
IC	ICES-003, RSS-247, RSS-102	ICES-003, RSS-247, RSS-102	ICES-003, RSS-102*	ICES-003, RSS-247, RSS-102*
CE	EMC 2014/30/EU (EN 55032, EN 55035, EN IEC 61000-3-2, EN 61000-3-3, EN 301 489-1/-17/-19/-52) RED 2014/53/EU (EN 300 328, EN 303 413, EN 301 908-1/-2/-13, EN IEC 62311, EN 50665, EN 50385) LVD 2014/35/EU (EN 62368-1)	EMC 2014/30/EU (EN 55032, EN 55024, EN 55035, EN 61000-3-2/-3; EN 301 489-1/-17) RED 2014/53/EU (EN 300 328, EN 62311) LVD 2014/35/EU (EN 60950-1, EN 62368-1)	EMC 2014/30/EU (EN 55032, EN 55035, EN 61000-3-2/-3; EN 301 489-1/-17/-52, Draft EN 301 489-19) * RED 2014/53/EU (EN 300 328, EN 303 413, EN 301 908-1/-2/-13, EN 62311) * LVD 2014/35/EU (EN 62368-1) *	EMC 2014/30/EU (EN 55032, EN 55035, EN 61000-3-2/-3; EN 301 489-1/-17/-52 RED 2014/53/EU (EN 300 328, EN 303 413, EN 301 908-1/-2/-13
UL	UL/CSA 62368-1	UL/CSA 60950-1, UL/CSA 62368-1	UL/CSA 62368-1	UL/CSA 62368-1
CB	IEC/EN 62368-1	IEC/EN 60950-1, IEC/EN 62368-1	IEC/EN 62368-1	IEC/EN 62368-1

* Applies to EA model only.

Certification notes:

The built-in modem offers quad-band connectivity to HSPA+ networks worldwide and expected to work in 3G mode worldwide, subject to carrier support.

There are exceptions however, as some carriers control the access to their network to specific carrier certified devices. These carriers allow only certified modem IMEI numbers on their network and have the ability to disable the LTE connection after a period of time.

The following carriers are known to require additional testing to obtain certification. Please reach out to the Fortinet sales team and to evaluate your specific regional requirements: Brazil (VIVO), USA (Sprint), New Zealand, Arabian Peninsula (all carriers), UK (All carriers).

Hardware Specifications

	FEX-211G	FEW-50G-AM	FEW-50G-EA
Hardware and System			
Modem Support	Internal (1x Modem) LTE CAT-12	Internal (1x Modem) 5G/LTE	Internal (1x Modem) 5G/LTE
Number of Antennas	3 SMA External (2x LTE + 1x GNSS)	8× 5G/LTE, 1x GNSS Internal Antennas	8× 5G/LTE, 1x GNSS Internal Antennas
Power over Ethernet (PoE) Powered	1x Port4, IEEE 802.3at (25.5W)	1x Port2, IEEE 802.3at (25.5W)	1x Port2, IEEE 802.3at (25.5W)
Ethernet Ports	1× 1GigE WAN, 4× 1GigE LAN	2× 5GE/2.5GE/1GE LAN/WAN RJ45 ports, 1x RJ45 Console port	2× 5GE/2.5GE/1GE LAN/WAN RJ45 ports, 1x RJ45 Console port
USB Ports	1x USB 2.0 Type-A	1x USB 3.0 Type-A with 5V/0.5A Output	1x USB 3.0 Type-A with 5V/0.5A Output
Bluetooth	BLE 5.0+	BLE 5.0+	BLE 5.0+
GPS Antenna Port	✓	Internal GPS Antenna	Internal GPS Antenna
Mounting Options	Wall-Mount / Desktop	Wall-Mount / Desktop	Wall-Mount / Desktop
Type	Indoor	Indoor	Indoor
Dimensions			
Height x Width x Length (inches)	1.5 × 6.22 × 6.22 (not including antenna length)	2.64 × 8.23 × 8.74	2.64 × 8.23 × 8.74
Height x Width x Length (mm)	38 × 158 × 158 (not including antenna length)	67 × 209 × 222	67 × 209 × 222
Weight	0.90 lbs (0.41 Kg)	1.0 kg (2.21 lbs)	1.0 kg (2.21 lbs)
Environment			
Power Required	PoE 802.3af/at or 12V/3A External Adapter	PoE 802.3at or 12V/3A Power Adapter (included)	PoE 802.3at or 12V/3A Power Adapter (included)
Power Consumption (Average)	9.18 W	15 W	15 W
Power Consumption (Maximum)	10.64 W	19 W	19 W
Operating Temperature	32°F to 104°F (0°C to 40°C)	0°C - 40°C	0°C - 40°C
Storage Temperature	-40°F to 158°F (-40°C to 70°C)	-20°C - 70°C	-20°C - 70°C
Humidity	5% to 95%	5% to 95% (non-condensing)	5% to 95% (non-condensing)
Certifications			
FCC	FCC Part 15B, 15C, 2.1091	FCC Part 15B, 15C, 2.1091	N/A
IC	ICES-003, RSS-247, RSS-102	ICES-003, RSS-247, RSS-102	N/A
CE	EMC 2014/30/EU (EN 55032, EN 55035, EN IEC 61000-3-2, EN 61000-3-3, EN 301 489-1/-17/-19/-52) RED 2014/53/EU (EN 300 328, EN 303 413, EN 301 908-1/-2/-13, EN IEC 62311, EN 50665, EN 50385) LVD 2014/35/EU (EN 62368-1)	N/A	EMC 2014/30/EU (EN 55032, EN 55035, EN IEC 61000-3-2, EN 61000-3-3, EN 301 489-1/-17/-19/-52) RED 2014/53/EU (EN 300 328, EN 303 413, EN 301 908-1/-2/-13/-25, EN IEC 62311, EN 50665, EN 18031-1) LVD 2014/35/EU (EN 62368-1)
UL	UL/CSA 62368-1	UL/CSA 62368-1	UL/CSA 62368-1
CB	IEC/EN 62368-1	IEC/EN 62368-1	IEC/EN 62368-1

Certification notes:

The built-in modem offers quad-band connectivity to HSPA+ networks worldwide and expected to work in 3G mode worldwide, subject to carrier support.

There are exceptions however, as some carriers control the access to their network to specific carrier certified devices. These carriers allow only certified modem IMEI numbers on their network and have the ability to disable the LTE connection after a period of time.

The following carriers are known to require additional testing to obtain certification. Please reach out to the Fortinet sales team and to evaluate your specific regional requirements: Brazil (VIVO), USA (Sprint), New Zealand, Arabian Peninsula (all carriers), UK (All carriers).

Hardware Specifications

	FEX-511G	FEX-511G-WIFI
Hardware and System		
Modem Support	5G Sub-6GHz module EM9291	5G Sub-6GHz module EM9291
Number of Antennas	4× 5G/LTE/GNSS Antennas	4× 5G/LTE/GNSS Antennas, 2x Wi-Fi Antennas
Power over Ethernet (PoE) Powered	1x Port4	1x Port4
Ethernet Ports	1-WAN2.5G, 1x SFP+RJ45 Combo 1G WAN, 3× 1G LAN	1-WAN2.5G, 1x SFP+RJ45 Combo 1G WAN, 3× 1G LAN
USB Ports	1x USB 2.0	1x USB 2.0
Bluetooth	BLE 5.0+	BLE 5.0+
GPS Antenna Port	Shared with 5G/LTE RF port1	Shared with 5G/LTE RF port1
Mounting Options	Desktop/Wall-Mounted	Desktop/Wall-Mounted
Type	Indoor	Indoor
Dimensions		
Height x Width x Length (inches)	1.27 × 8.98 × 5.83	1.27 × 8.98 × 5.83
Height x Width x Length (mm)	31 × 228 × 148	31 × 228 × 148
Weight	Device (Net weight): 1.0 kg (2.3 lb) Package (Gross weight): 1.8 kg (4.0 lb)	Device (Net weight): 1.1 kg (2.4 lb) Package (Gross weight): 1.9 kg (4.2 lb)
Environment		
Power Required	25.5 W (PoE at)	25.5 W (PoE at)
Power Consumption (Average)	13.8 W	18.8 W
Power Consumption (Maximum)	18.0 W	22.5 W
Operating Temperature	32°F to 104°F (0°C to 40°C)	32°F to 104°F (0°C to 40°C)
Storage Temperature	-4°F to 158°F (-20°C to 70°C)	-4°F to 158°F (-20°C to 70°C)
Humidity	5% to 95%	5% to 95%
Certifications		
FCC	FCC Part 15B, 15C, 2.1091	FCC Part 15B, 15C, 15E, 2.1091
IC	ICES-003, RSS-247, RSS-102	ICES-003, RSS-247, RSS-102
CE	EMC 2014/30/EU (EN 55032, EN 55035, EN 61000-3-2/-3-3; EN 301 489-1/-17/-19/-52) RED 2014/53/EU (EN 300 328, EN 303 413, EN 301 908-1/-2/-13/-25, EN IEC 62311) LVD 2014/35/EU (EN 62368-1)	EMC 2014/30/EU (EN 55032, EN 55035, EN 61000-3-2/-3-3; EN 301 489-1/-17/-19/-52) RED 2014/53/EU (EN 300 328, EN 301 893, EN 300 440, EN 303 413, EN 301 908-1/-2/-13/-25, EN IEC 62311) LVD 2014/35/EU (EN 62368-1)
UL	UL/CSA 62368-1	UL/CSA 62368-1
CB	IEC/EN 62368-1	IEC/EN 62368-1

Certification notes:

The built-in modem offers quad-band connectivity to HSPA+ networks worldwide and expected to work in 3G mode worldwide, subject to carrier support.

There are exceptions however, as some carriers control the access to their network to specific carrier certified devices. These carriers allow only certified modem IMEI numbers on their network and have the ability to disable the LTE connection after a period of time.

The following carriers are known to require additional testing to obtain certification. Please reach out to the Fortinet sales team and to evaluate your specific regional requirements: Brazil (VIVO), USA (Sprint), New Zealand, Arabian Peninsula (all carriers), UK (All carriers).

3G/4G-LTE/5G Specifications

	FEX-101G	FEX-201F-EA	FEX-202F-AM	FEX-211G
Regional Compatibility				
Applied Region	Global Carriers	EMEA, APAC Carriers	North America Carriers	Global Carriers
Internal Modem Specifications				
Modem Model	Telit LN920A6-WW (CAT-6)	Sierra Wireless EM7421	Sierra Wireless EM7411 (2x Modem)	Telit LN920A12-WW (CAT-12)
5G NR SA and NSA *	—	—	—	—
4G: LTE *	Bands: 1, 2, 3, 4, 5, 7, 8, 12, 13, 14, 17, 18, 19, 20, 25, 26, 28, 29, 30, 38, 39, 40, 41, 42, 43, 48 (CBRS), 66, 71	CAT-7 Bands: 1, 3, 7, 8, 20, 28, 32, 38, 40, 41, 42, 43	CAT-7 Bands: 2, 4, 5, 7, 12, 13, 14, 25, 26, 41, 42, 43, 48, 66, 71	Bands: 1, 2, 3, 4, 5, 7, 8, 12, 13, 14, 17, 18, 19, 20, 25, 26, 28, 29, 30, 38, 39, 40, 41, 42, 43, 48 (CBRS), 66, 71
3G: UMTS/HSPA+ *	Bands: 1, 2, 4, 5, 8	Bands: 1, 5, 8	Bands: 2, 4, 5	Bands: 1, 2, 4, 5, 8
3G: WCDMA *	Bands: 1, 2, 4, 5, 6, 8, 9, 19	Bands: 1, 5, 8	Bands: 2, 4, 5	Bands: 1, 2, 4, 5, 6, 8, 9, 19
Additional Ports	GPS antenna port	GPS antenna port	GPS antenna port	GPS antenna port
Connector Type	SMA (MAIN, AUX, GPS)	SMA (MAIN, AUX, GPS)	SMA LTE1 (MAIN, AUX, GPS) LTE2 (MAIN, AUX, GPS)	SMA (MAIN, AUX, GPS)
Module Certifications	RCM, ANATEL, ISED, CCC, JATE/ TELEC, NCC, UKCA, FCC, PTCRB, GCF, TELSTRA, KDDI, DOCOMO, AT&T, TMO, VZW	GCF, NCC	FCC, IC, GCF, PTCRB	RCM, ANATEL, ISED, CCC/NAL/ SRRC, RED, JATE/TELEC, KCC, NCC, UKCA, FCC, PTCRB, GCF, TELSTRA, KDDI, DOCOMO, SPK NZ, AT&T, VZW, TMO.
Diversity	✓	✓	✓	✓
MIMO	✓	✓	✓	✓
GNSS Bias	✓	✓	✓	✓

	FEW-50G-AM	FEW-50G-EA	FEX-511G	FEX-511G-WIFI
Regional Compatibility				
Applied Region	Global Carriers	Global Carriers	Global Carriers	Global Carriers
Internal Modem Specifications				
Modem Model	Single 5G MediaTek-T830 (HMT89-LD)	Single 5G MediaTek-T830 (HMT89-EPV)	EM9291	EM9291
5G NR SA and NSA *	n2/ 5/ 7/ 12/ 13/ 14/ 25/ 26/ 29/ 30/ 38/ 41/ 48/ 66/ 70/ 71/ 77/ 78	NR NSA: n1/ 3/ 5 / 7/ 8/ 20/ 28/ 38/ 40/ 41/ 75/ 76/ 77/ 78	n1, n2, n3, n5, n7, n8, n12, n13, n14, n18, n20, n25, n26, n28, n29, n30, n38, n40, n41, n48, n66, n70, n71, n75, n76, n77, n78, n79	n1, n2, n3, n5, n7, n8, n12, n13, n14, n18, n20, n25, n26, n28, n29, n30, n38, n40, n41, n48, n66, n70, n71, n75, n76, n77, n78, n79
4G: LTE *	LTE-FDD: B2/ 4/ 5/ 7/ 12 (17)/ 13/ 14/ 25/ 26/ 29/ 30/ 66/ 70/ 71 and LTE-TDD: B38/ 41/ 42/ 43/ 48 and LAA: B46	LTE-FDD: B1/ 3/ 5 / 7/ 8/ 20/ 28/ 32 and LTE-TDD: B38/ 40/ 41/ 42/ 43	B1, B2, B3, B4, B5, B7, B8, B12, B13, B14, B17, B18, B19, B20, B25, B26, B28, B29, B30, B32, B34, B38, B39, B40, B41, B42, B43, B46, B48, B66, B71	B1, B2, B3, B4, B5, B7, B8, B12, B13, B14, B17, B18, B19, B20, B25, B26, B28, B29, B30, B32, B34, B38, B39, B40, B41, B42, B43, B46, B48, B66, B71
3G: UMTS/HSPA+ *	—	—	B1, B2, B4, B5, B8, B19	B1, B2, B4, B5, B8, B19
3G: WCDMA *	—	B1/ 5/ 8/	B1, B2, B4, B5, B8, B19	B1, B2, B4, B5, B8, B19
Additional Ports	—	—	—	—
Connector Type	NA	NA	4x SMA (MAIN, MIMO1/GPS, MIMO2, MIMO3)	2x Wi-Fi (RP-SMA), 4x SMA (MAIN, MIMO1/GPS, MIMO2, MIMO3)
Module Certifications	IC, FCC, GCF, RoHS, AT&T, T-Mobile, Verizon, PTCRB, EchoStar (Dish)	GCF, CE, RCM, RoHS, Deutsche Telekom, British Telecom, Orange, Telstra (All Carrier Certs TBD)	—	—
Diversity	✓	✓	✓	✓
MIMO	✓	✓	✓	✓
GNSS Bias	✓ GPS/ BDS/ GLONASS/ Galileo/ QZSS, L1 + L5	✓ GPS/ BDS/ GLONASS/ Galileo/ QZSS	NA	NA

* Supported frequency bands are contingent upon the modem vendor's firmware integrity, the Fortinet software version deployed, and carrier-specific configurations.
Fortinet makes no guarantees regarding continued compatibility of bands across all carriers, FortiExtender hardware or software versions.

Features

	FEX-101G	FEX-201F-EA	FEX-202F-AM	FEX-211G	FEW-50G-AM	FEW-50G-EA	FEX-511G	FEX-511G-WIFI
Advanced Radio Technology								
2×2 MIMO — enables industry leading data speeds	✓	✓	✓	✓	✓	✓	✓	✓
4×4 MIMO — enables industry leading data speeds	—	—	—	—	✓	✓	✓	✓
5G Downlink 4×4 MIMO bands: * n1, n2, n3, n7, n25, n38, n40, n41, n48, n66, n77, n78, n79	—	—	—	—	—	—	✓	✓
5G Uplink 2 × 2 MIMO Band: * n41	—	—	—	—	—	—	✓	✓
LTE Downlink 4 × 4 MIMO bands: * B1, B2, B3, B4, B7, B25, B30, B32, B34, B38, B39, B40, B41, B42, B43, B48, B66	—	—	—	—	—	—	—	—
LTE Downlink 4 × 4 MIMO bands: * B1, B2, B3, B4, B7, B25, B30, B32, B38, B39, B40, B41, B66	—	—	—	—	—	—	—	—
LTE Downlink 4 × 4 MIMO bands: * B1, B2, B3, B4, B7, B25, B30, B32, B38, B39, B40, B41, B42, B43, B48, B66, B70	—	—	—	—	—	—	✓	✓
Receiver Equalization — improves performance in noisy and highly mobile environments	✓	✓	✓	✓	✓	✓	—	—
Receiver Diversity — improves performance at cell edges and in buildings	✓	✓	✓	✓	✓	✓	✓	✓
Dual Modem	—	—	✓	—	—	—	—	—
2×2 2.4/5GHz 802.11 a/b/g/n/ac Wave2 Wi-Fi Support	—	—	—	—	—	—	—	—
2×2 2.4G/5GHz concurrent Wi-Fi 6 (802.11ax)	—	—	—	—	—	—	—	✓
Advanced Software Features								
Connection Status	✓	✓	✓	✓	✓	✓	✓	✓
Auto-connect	✓	✓	✓	✓	✓	✓	✓	✓
Auto-select Network	✓	✓	✓	✓	✓	✓	✓	✓
Data Byte Count	✓	✓	✓	✓	✓	✓	✓	✓
Network Profile	✓	✓	✓	✓	✓	✓	✓	✓
Self-diagnostics	✓	✓	✓	✓	✓	✓	✓	✓
Power Management — standby and hibernate selective suspend	✓	✓	✓	✓	✓	✓	✓	✓
DIAG and AT Commands	✓	✓	✓	✓	✓	✓	✓	✓
Private IP SIM Support	✓	✓	✓	✓	✓	✓	✓	✓
L2 Tunnel Mode via VLAN or CAPWAP for fast and flexible deployments	✓	✓	✓	✓	✓	✓	✓	✓
Single Pane of Glass Management via FortiGate and FortiManager	✓	✓	✓	✓	✓	✓	✓	✓
SIM Features								
Dual-SIM Support with intelligent fail-over algorithms	✓	✓	✓	✓	✓	✓	✓	✓
SIM Size	Micro-SIM 3FF	Micro-SIM 3FF	Micro-SIM 3FF	Micro-SIM 3FF	Nano-SIM 4FF	Nano-SIM 4FF	Micro-SIM 3FF	Micro-SIM 3FF
SIM Security Cover	✓	✓	✓	✓	✓	✓	✓	✓
IMEI printed at bottom of enclosure for ease of activation	✓	✓	✓	✓	✓	✓	✓	✓
eSIM	✓	—	—	✓	✓	✓	✓	✓

* Supported frequency bands are contingent upon the modem vendor's firmware integrity, the Fortinet software version deployed, and carrier-specific configurations. Fortinet makes no guarantees regarding continued compatibility of bands across all carriers, FortiExtender hardware or software versions.

The built-in modem offers quad-band connectivity to HSPA+ networks worldwide and is expected to work in 3G mode worldwide, subject to carrier support. There are exceptions however, as some carriers control the access to their network to specific carrier certified devices. These carriers allow only certified modem IMEI numbers on their network and have the ability to disable the LTE connection after a period of time.

ⓘ Certifications are in progress. The following carriers are known to require additional testing to obtain certification. Please reach out to the Fortinet sales team and to evaluate your specific regional requirements: Brazil (VIVO), USA (Sprint), New Zealand, Arabian Peninsula (all carriers), and UK (all carriers).

Features

	FEX-101G	FEX-201F-EA	FEX-202F-AM	FEX-211G	FEW-50G-AM	FEW-50G-EA	FEX-511G	FEX-511G-WIFI
Bandwidth Information								
IPsec VPN (Wired)	890 Mbps	220 Mbps	220 Mbps	890 Mbps	DL/UL: 370 Mbps/ 320 Mbps	DL/UL: 370 Mbps/3 20 Mbps	920 Mbps	920 Mbps
IPsec VPN (LTE/5G)	160 Mbps	100 Mbps	100 Mbps	170 Mbps	DL/UL: 430 Mbps/ 50 Mbps	DL/UL: 430 Mbps/ 50 Mbps	400 Mbps	400 Mbps
Lan-Extension (VxLAN over IPsec)	DL/UL: 600 Mbps/ 350 Mbps	200 Mbps	200 Mbps	DL/UL: 600 Mbps/ 350 Mbps	N/A	N/A	600 Mbs	600 Mbs
LAN-LAN Layer-2 Frames	950 Mbps	930 Mbps	930 Mbps	950 Mbps	N/A	N/A	950 Mbps	950 Mbps
LAN-WAN NAT 'ed Layer-3 packets	900 Mbps	930 Mbps	930 Mbps	900 Mbps	DL/UL: 2.81 Gbps/ 3.10 Gbps	DL/UL: 2.81 Gbps/ 3.10 Gbps	900 Mbps	900 Mbps
Max WAN Uplinks Supported	1	1	1	1	1	1	1	1
Carrier Certifications								
Verizon	In Progress	N/A	✓	In Progress	In-Progress	N/A	✓	✓
ATT	✓	N/A	✓	✓	In-Progress	N/A	✓	✓
PTCRB	✓	N/A	✓	✓	✓	N/A	✓	✓
T-Mobile	In Progress	N/A	✓	In Progress	Planned	N/A	✓	✓
Public Safety Network	FirstNet Capable-4G FirstNet Trusted In-progress	N/A	—	FirstNet Capable-4G FirstNet Trusted In-progress	Planned	N/A	FirstNet Capable-5G FirstNet Trusted In-progress	FirstNet Capable-5G FirstNet Trusted In-progress

* Supported frequency bands are contingent upon the modem vendor's firmware integrity, the Fortinet software version deployed, and carrier-specific configurations. Fortinet makes no guarantees regarding continued compatibility of bands across all carriers, FortiExtender hardware or software versions.

The built-in modem offers quad-band connectivity to HSPA+ networks worldwide and is expected to work in 3G mode worldwide, subject to carrier support. There are exceptions however, as some carriers control the access to their network to specific carrier certified devices. These carriers allow only certified modem IMEI numbers on their network and have the ability to disable the LTE connection after a period of time.

(!) Certifications are in progress. The following carriers are known to require additional testing to obtain certification. Please reach out to the Fortinet sales team and to evaluate your specific regional requirements: Brazil (VIVO), USA (Sprint), New Zealand, Arabian Peninsula (all carriers), and UK (all carriers).

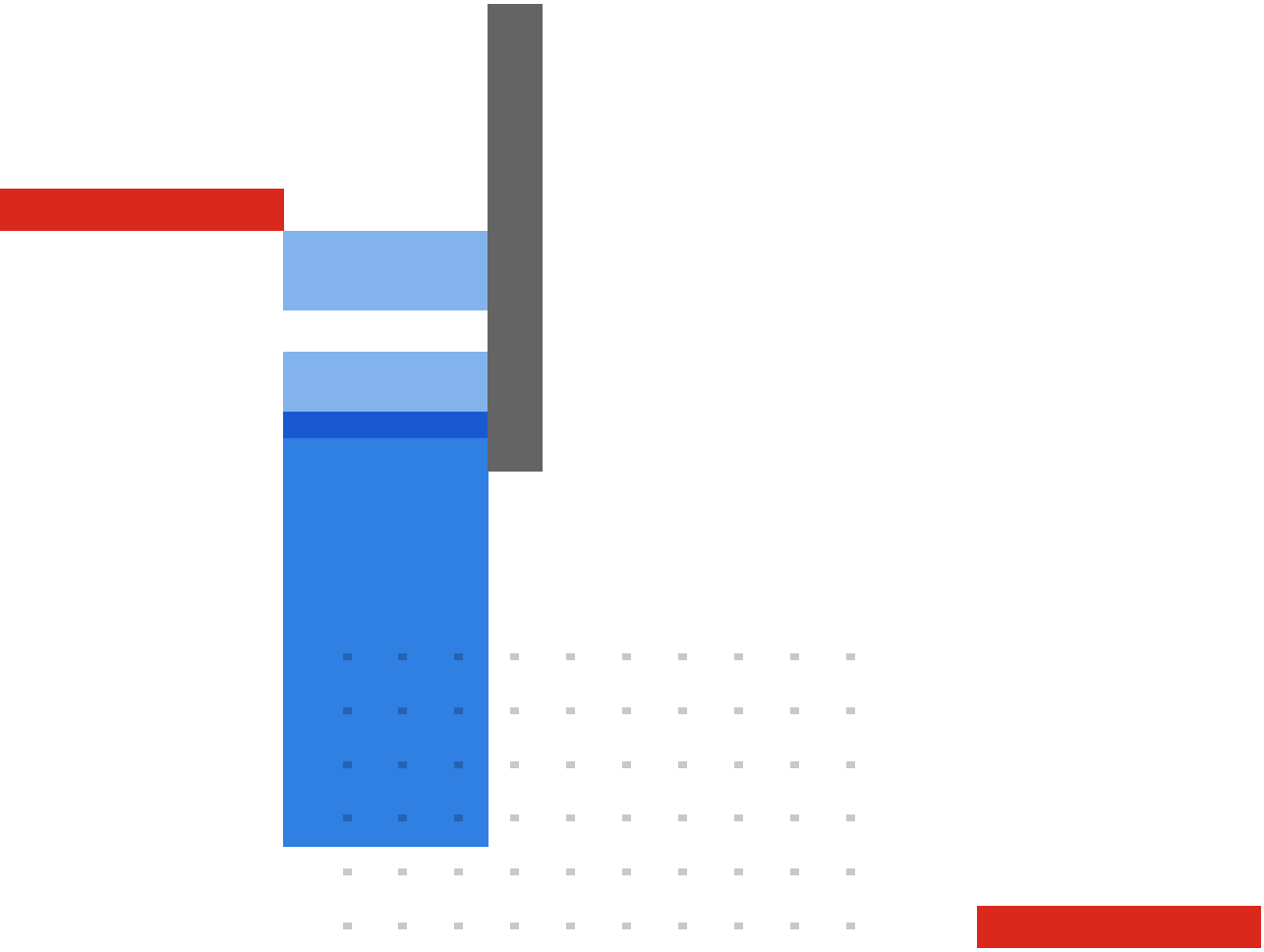
Ordering Information

PRODUCT	SKU	DESCRIPTION
3G/4G-LTE/5G Models		
FortiExtender 101G	FEX-101G	Indoor Broadband Wireless WAN Router with 1x Dual SIM LTE CAT 6 M.2 Module (DL/UL=300M/50Mbps) + 1x reserved eSIM for NA/APAC/EMEA Carriers. 1x GigE WAN + 4x GigE LAN network ports and GPS/GNSS service, including 1× 802.3at (25.5W) POE PD port or optional DC 12V/2A power adapter (sold separately). 1x USB2.0 Type A port, 1x RJ45 console port and low energy Bluetooth (BLE 5.0 or above). Find region specific power adaptors under accessories.
FortiExtender 201F	FEX-201F-EA	Indoor Broadband Wireless WAN Router with 1x Dual SIM 3G/4G LTE CAT7 M.2 Module (DL/UL=300M/150Mbps) for EMEA/APAC Carriers. 5x GE WAN/LAN configurable RJ45 ports including 1× 802.3af/at POE PD port and GPS/GNSS service.
FortiExtender 202F	FEX-202F-AM	Indoor Broadband Wireless WAN Router with 2x Dual SIM 3G/4G LTE CAT7 M.2 Module (DL/UL=300M/150Mbps) for North America Carriers. 5x GE WAN/LAN configurable RJ45 ports including 1× 802.3af/at POE PD port and GPS/GNSS service.
FortiExtender 211G	FEX-211G	Indoor Broadband Wireless WAN Router with 1x Dual SIM LTE CAT 12 M.2 Module (DL/UL=600M/150Mbps) + 1x reserved eSIM for NA/APAC/EMEA Carriers. 1x GigE WAN + 4x GigE LAN network ports and GPS/GNSS service, including 1× 802.3at (25.5W) POE PD port or optional DC 12V/2A power adapter. 1x USB2.0 Type A port, 1x RJ45 console port and low energy Bluetooth (BLE 5.0 or above). Region specific power adaptors sold separately (See Accessories).
FortiExtenderWAN-50G-AM	FEW-50G-AM	Indoor desktop/wall mount Broadband Wireless WAN Router for WAN-Extension with FortiGate, delivering high performance, high-speed 5G indoor connectivity. One Dual-SIM 5G/LTE Module (DL-7Gbps/UL-2.5Gbps max in 5G/Sub6 SA mode), plus one eSIM for North America carriers. Two 5G/2.5G/1G/100M Ethernet RJ45 LAN ports and GPS/GNSS services, either power with one 802.3at (25.5W) PoE PD port (LAN2) or with included DC 12V/2A power adapter. One USB 3.0 Type-A port, one RJ45 console port and low energy Bluetooth (BLE 5.0+).
FortiExtenderWAN-50G-EA	FEW-50G-EA	Indoor desktop/wall mount Broadband Wireless WAN Router for WAN-Extension with FortiGate, delivering high performance, high-speed 5G indoor connectivity. One Dual-SIM 5G/LTE Module (DL-7Gbps/UL-2.5Gbps max in 5G/Sub6 SA mode), plus one eSIM for EMEA/APAC/LATAM carriers. Two 5G/2.5G/1G/100M Ethernet RJ45 LAN ports and GPS/GNSS services, either power with one 802.3at (25.5W) PoE PD port (LAN2) or with included DC 12V/2A power adapter. One USB 3.0 Type-A port, one RJ45 console port and low energy Bluetooth (BLE 5.0+).
FortiExtender 511G	FEX-511G	Indoor Broadband Wireless WAN Router with 1x Dual SIM 5G Sub-6GHz M.2 Module + 1x reserved eSIM for NA/EU/APAC Carriers. It has 1× 2.5GbE + 1x GbE Combo (SFP + RJ45) + 3x GbE RJ45 WAN/LAN configurable network ports, 1x USB2.0 Type A port, 1x RJ45 console port and low energy Bluetooth (BLE 5.0 or above). It can be powered either by PoE 802.3at (25.5W) or optional DC 12V/2A power adapter.
	FEX-511G-WiFi	Indoor Broadband Wireless WAN Router with 1x Dual SIM 5G Sub-6GHz M.2 Module + 1x reserved eSIM for NA/EU/APAC Carriers. It has 1× 2.5GbE + 1x GbE Combo (SFP + RJ45) + 3x GbE RJ45 WAN/LAN configurable network ports, 1x USB2.0 Type A port, 1x RJ45 console port, 2×2 2.4G/5G concurrent WiFi6 (802.11ax) and low energy Bluetooth (BLE 5.0 or above). It can be powered either by PoE 802.3at (25.5W) or optional DC 12V/2A power adapter. * Select the correct region code.
Ethernet Models		
FortiExtender 200F	FEX-200F	FEX-200F is an extension of the FortiGate LAN interface, connecting to FortiGate with a secured L2 tunnel for Layer2~Layer7 security for branch offices. 5x GbE RJ45 ports, each can be configured as WAN or LAN by software.
FortiCare		
FortiCare Support	FC-10-X101G-247-02-DD	FortiCare Premium Support.
	FC-10-FE21F-247-02-DD	FortiCare Premium Support.
	FC-10-FA22F-247-02-DD	FortiCare Premium Support.
	FC-10-X211G-247-02-DD	FortiCare Premium Support.
	FC-10-FA50G-247-02-DD	FortiCare Premium Support.
	FC-10-FE50G-247-02-DD	FortiCare Premium Support.
	FC-10-FX51G-247-02-DD	FortiCare Premium Support.
	FC-10-FX51G-247-02-DD	FortiCare Premium Support.
	FC-10-XW51G-247-02-DD	FortiCare Premium Support.
Accessories		
Power Adapter	SP-FEX12V3A-PA-1-EU	AC Power adapter with EU plug for Europe, for use with FortiExtender FEX-101F, FEX-201F, FEX-202F, FEX-511G, and FEX-511G-WiFi models.
Power Adapter	SP-FEX12V3A-PA-1-UK	AC Power adapter with UK plug for use with FortiExtender FEX-101F, FEX-201F, FEX-202F, FEX-511G, and FEX-511G-WiFi models. 10pcs/Pack.
Power Adapter	SP-FEX12V3A-PA-1-US	AC Power adapter with US plug for North America and Japan, for use with FortiExtender FEX-101F, FEX-201F, FEX-202F, FEX-511G, and FEX-511G-WiFi models.
PoE Injector	GPI-115	1-Port Gigabit PoE Power Injector, 802.3af 15.4Watts 10/100/1000 (PD-3501). for GPI-115 Gigabit PoE Injector.
PoE Injector	GPI-130	1-Port Gigabit PoE Power Injector, 802.3at up to 30W for GPI-130 Gigabit PoE Injector.

Visit https://www.fortinet.com/resources/ordering-guides for related ordering guides.

Fortinet Corporate Social Responsibility Policy

Fortinet is committed to driving progress and sustainability for all through cybersecurity, with respect for human rights and ethical business practices, making possible a digital world you can always trust. You represent and warrant to Fortinet that you will not use Fortinet's products and services to engage in, or support in any way, violations or abuses of human rights, including those involving illegal censorship, surveillance, detention, or excessive use of force. Users of Fortinet products are required to comply with the Fortinet EULA and report any suspected violations of the EULA via the procedures outlined in the Fortinet Whistleblower Policy.



FORTINET

www.fortinet.com

May 1, 2026

FEXT-DAT-R55-20260501