

# FortiExtender™ Series

## Available in



Appliance

## Highlights

Improves user experience through optimal 5G and LTE wireless signal

Provides secure network failover with out of band management (OBM), dual SIM, and dual Modem capabilities

Integrates with Fortinet Secure SD-WAN for ease of deployment, management, and security

Offers dynamic, flexible edge connectivity—switch links among ISPs based on data consumption, schedules, or ad hoc

Enables network access for remote sites and branches located beyond fixed broadband

Accelerates cloud connectivity for any user with flexible on-ramp paths to SaaS/IaaS

Reduces overall WAN TCO with FortiGate Network Security Platform integration

Cloud-based management empowers businesses with globally distributed locations

Four LAN ports and routing capabilities enable remote connectivity and networking



## Extend, Ensure, and Secure Your Network

FortiExtender offers scalable, cost-effective, and resilient 5G, LTE, and Ethernet solutions. Driven by Fortinet's unique approach of Security-driven 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 vehicle fleet communication, 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.

## Security-Driven Networking

### Security Fabric Integration

Integration with Fortinet SD-WAN and FortiGate appliances secures internet edge breakouts with a complete set of Web, Content, and Device security controls far beyond other industry solutions.

### Optimal Signal Strength

A single PoE cable provides optimal 5G/LTE signal vs complex, lossy antenna cables or limited strength USB modems. Dual SIM and Dual Modem options offer up to 5X network reliability.

### Simplified Management

Manage your FortiExtender from the FortiManager, FortiGate, or FortiExtender Cloud dashboard, making network changes, security controls, and policy automation simple.

The screenshot shows the FortiGate 200E FortiExtender configuration interface. The left sidebar lists various configuration categories, with 'FortiExtender' highlighted. The main configuration area shows details for a specific FortiExtender unit, including its serial number, alias, state, and authorized status. The 'Modem 1' section is expanded, showing interface settings and modem health. The right sidebar displays 'Diagnostics and Tools' for the selected unit, including a table of SIM status and a table of Modem 1 health.

SIM Slot	Status	Carrier	Phone Number	Switch Status	Data Usage	IMSI	ICCID
SIM 1	Inserted	Verizon	+16692155724	Active	4 MB of 1000 MB	311480347682489	891480000
SIM 2	Not Inserted			Backup	0 MB	N/A	

FortiExtender managed with FortiGate

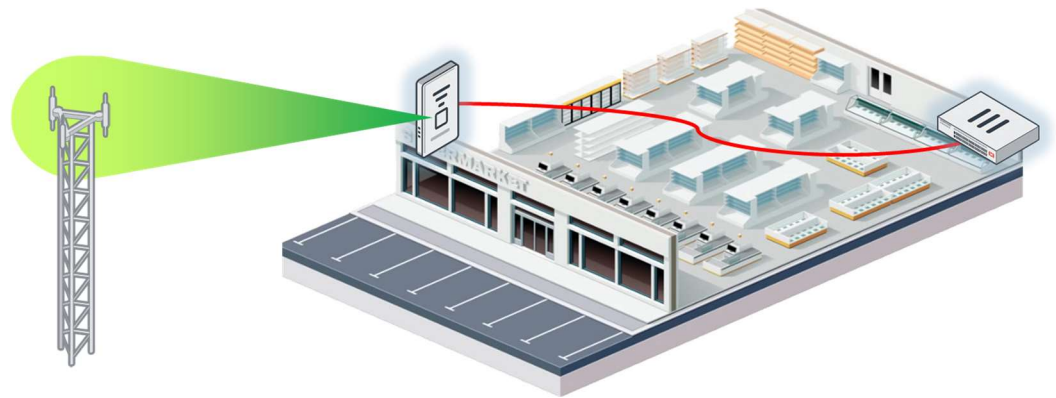
## Features

### Superior Management, Security, and Control

FortiExtenders are a true plug-and-play device. Once connected to the FortiGate, they appear as a regular network interface in FortiOS management. IT administrators can manage the connection as well as implement complete UTM security and control, just like any other FortiGate interface. In addition, FortiOS will display data quota usage on the wireless WAN interface, providing complete visibility of the connection to ensure costly carrier data limits are not exceeded. The superior management, security, and control of the FortiExtender ultimately reduces IT costs while extending, ensuring, and securing the network.

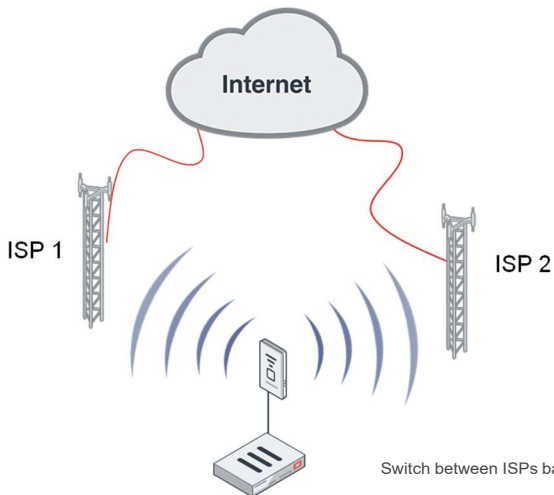
### Flexible Deployment for Optimal Signal Strength

FortiExtender devices are designed to receive the best possible 5G/LTE signal. The device utilizes Power over Ethernet (PoE) so you can run a high-quality ethernet cable to a location with optimal signal strength, up to 100 m away from the FortiGate or Network Switch.



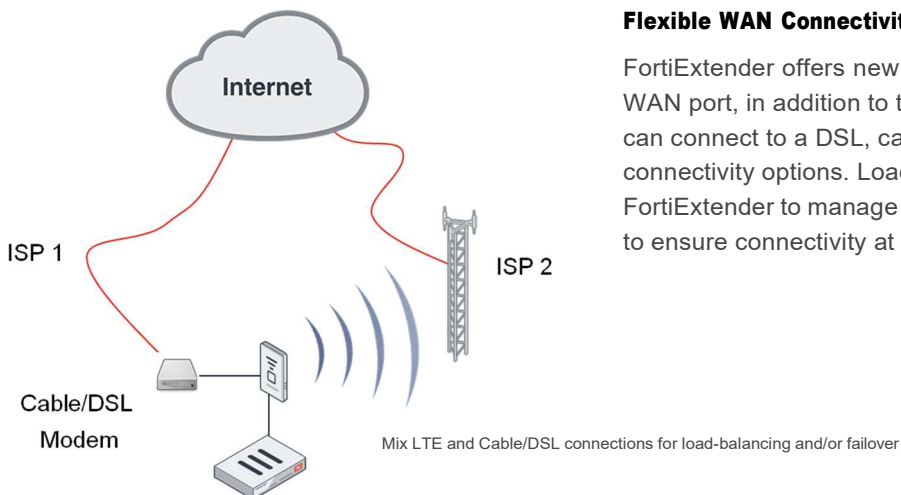
FortiExtender can be placed near a window for optimal signal strength

## Deployment



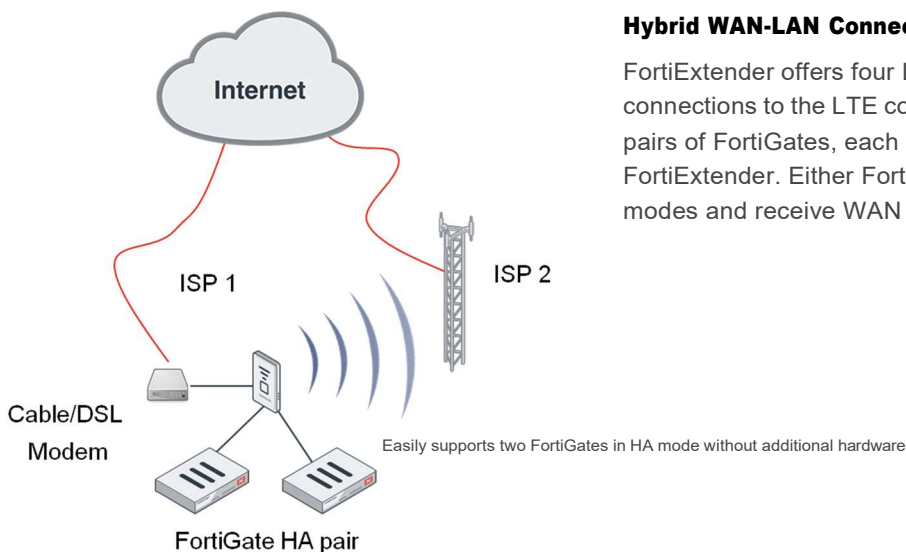
### Flexible 5G/LTE Connectivity

The FortiExtender family of 5G/LTE appliances support dual SIM and dual modem options, enabling up to four different ISPs for 5G/LTE connectivity. Our dual SIM models allow for one active and one passive cellular link, providing fast failover. Dual Modem options provide two active and two passive links, for the fastest failover and disaster recovery. You can also configure the FortiExtender to utilize an ISP link until a certain data usage threshold is reached. At that point, FortiExtender can automatically shift over to another ISP and use that 5G/LTE connection. Additional conditions can be set to shift the connection between SIM cards, allowing you to balance connectivity and cost.



### Flexible WAN Connectivity

FortiExtender offers new WAN connectivity options with an Ethernet WAN port, in addition to the LTE WAN links. With this WAN port, you can connect to a DSL, cable, or another modem for additional WAN connectivity options. Load-balancing and failover options enable your FortiExtender to manage your WAN connections across several options to ensure connectivity at the best cost point.



### Hybrid WAN-LAN Connectivity

FortiExtender offers four LAN Ethernet ports to enable multiple connections to the LTE connection. 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.



## Hardware Specifications

	FEX-101F-AM	FEX-101F-EA	FEX-201F-AM	FEX-201F-EA
<b>Hardware and System</b>				
<b>Modem Support</b>	Internal (1x Modem)	Internal (1x Modem)	Internal (1x Modem)	Internal (1x Modem)
<b>Number of Antennas</b>	3 SMA External	3 SMA External	3 SMA External	3 SMA External
<b>Power over Ethernet</b>	IEEE 802.3af (15.4 W)	IEEE 802.3af (15.4 W)	IEEE 802.3af (15.4 W)	IEEE 802.3af (15.4 W)
<b>Ethernet Ports</b>	5 GE RJ45 Ports (WAN + LAN)	5 GE RJ45 Ports (WAN + LAN)	5 GE RJ45 Ports (WAN + LAN)	5 GE RJ45 Ports (WAN + LAN)
<b>Bluetooth</b>	N/A	N/A	Maximum Transmit Power 10 dBm Frequency 2.4 GHz	Maximum Transmit Power 10 dBm Frequency 2.4 GHz
<b>GPS Antenna Port</b>	Yes	Yes	Yes	Yes
<b>Mounting Options</b>	Wall Mount / Desktop	Wall Mount / Desktop	Wall Mount / Desktop	Wall Mount / Desktop
<b>Type</b>	Indoor	Indoor	Indoor	Indoor
<b>Dimensions</b>				
<b>Height x Width x Length</b>	1.45 x 5.9 x 5.9 (not including antenna length)	1.45 x 5.9 x 5.9 (not including antenna length)	1.5 x 5.9 x 5.9 (not including antenna length)	1.5 x 5.9 x 5.9 (not including antenna length)
<b>Height x Width x Length</b>	37 x 150 x 150 (not including antenna length)	37 x 150 x 150 (not including antenna length)	38 x 150 x 150 (not including antenna length)	38 x 150 x 150 (not including antenna length)
<b>Weight</b>	0.81 lbs (0.37 kg)	0.81 lbs (0.37 kg)	0.81 lbs (0.37kg)	0.81 lbs (0.37kg)
<b>Environment</b>				
<b>Power Required</b>	12V/3A	12V/3A	12V/3A	12V/3A
<b>Power Consumption</b>	6.5 W	6.5 W	6.50W	6.50W
<b>Power Consumption</b>	8.5 W	8.5 W	8.50W	8.50W
<b>Operating Temperature</b>	32°–104°F (0°–40°C)	32°–104°F (0°–40°C)	32°–104°F (0°–40°C)	32°–104°F (0°–40°C)
<b>Storage Temperature</b>	-4°–158°F (-20°–70°C)	-4°–158°F (-20°–70°C)	-4°–158°F (-20°–70°C)	-4°–158°F (-20°–70°C)
<b>Humidity</b>	5%–95%	5%–95%	5%–95%	5%–95%
<b>Certifications</b>				
<b>FCC</b>	FCC Part 15B, 2.1091	—	FCC Part 15B, 15C, 2.1091	—
<b>IC</b>	ICES-003, RSS-102	—	ICES-003, RSS-247, RSS-102	—
<b>CE</b>	—	EMC 2014/30/EU (EN 55032, EN 55024, EN 55035, EN 61000-3-2/-3; EN 301 489-1/-19, Draft EN 301 489-52)  RED 2014/53/EU (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, 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)
<b>UL</b>	UL/CSA 62368-1	UL/CSA 62368-1	UL/CSA 62368-1	UL/CSA 62368-1
<b>CB</b>	IEC/EN 60950-1, IEC/EN 62368-1	IEC/EN 60950-1, 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-202F-AM	FEX-202F-EA	FEX-200F
<b>Hardware and System</b>			
<b>Modem Support</b>	Internal (2x Modem)	Internal (2x Modem)	N/A
<b>Number of Antennas</b>	6 SMA External	6 SMA External	N/A
<b>Power over Ethernet (PoE) Powered</b>	IEEE 802.3af (15.4 W)	IEEE 802.3af (15.4 W)	N/A
<b>Ethernet Ports</b>	5 GE RJ45 Ports (WAN + LAN)	5 GE RJ45 Ports (WAN + LAN)	5 GbE RJ45 ports (WAN or LAN configurable)
<b>Bluetooth</b>	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
<b>GPS Antenna Port</b>	Yes	Yes	N/A
<b>Mounting Options</b>	Wall Mount/Desktop	Wall Mount/Desktop	Wall Mount / Desktop
<b>Type</b>	Indoor	Indoor	Indoor
<b>Dimensions</b>			
<b>Height x Width x Length (inches)</b>	1.5 x 6.22 x 6.22 (not including antenna length)	1.5 x 6.22 x 6.22 (not including antenna length)	1.02 x 7.09 x 3.9
<b>Height x Width x Length (mm)</b>	38 x 158 x 158 (not including antenna length)	38 x 158 x 158 (not including antenna length)	27 x 180 x 99.9
<b>Weight</b>	0.90 lbs (0.41 kg)	0.90 lbs (0.41 kg)	1.01 lbs (0.46 kg)
<b>Environment</b>			
<b>Power Required</b>	12V/3A External Adapter/PoE(af/at)	12V/3A External Adapter/PoE(af/at)	12V/1A External Adapter
<b>Power Consumption (Average)</b>	7.55W	6.50W	
<b>Power Consumption (Maximum)</b>	9.40W	8.50W	6.19 W (21.12 BTU/hr) @ -5C 6.81 W (23.24 BTU/hr) @ 50C
<b>Operating Temperature</b>	32°–104°F (0°–40°C)	32°–104°F (0°–40°C)	32°–104°F (0°–40°C)
<b>Storage Temperature</b>	-4°–158°F (-20°–70°C)	-4°–158°F (-20°–70°C)	-4°–158°F (-20°–70°C)
<b>Humidity</b>	5%–95%	5%–95%	5%–95%
<b>Certifications</b>			
<b>FCC</b>	FCC Part 15B, 15C, 2.1091	—	FCC Part 15B, 15C, 2.1091
<b>IC</b>	ICES-003, RSS-247, RSS-102	—	ICES-003, RSS-247, RSS-102
<b>CE</b>	—	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 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)
<b>UL</b>	UL/CSA 62368-1	UL/CSA 62368-1	UL/CSA 60950-1, UL/CSA 62368-1
<b>CB</b>	IEC/EN 62368-1	IEC/EN 62368-1	IEC/EN 60950-1, 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-211E	FEX-212F	FEX 311F	FEX-511F
<b>Hardware and System</b>				
<b>Modem Support</b>	Internal (1x Modem)	Internal (2x Modem)	Internal (1x Modem)	Internal (1x Modem) TS 2.5 puntos
<b>Number of Antennas</b>	3 SMA External	6 SMA External	4 SMA External	4 x 5G/LTE/GNSS All-in-One Antennas TS 2.6 puntos
<b>Power over Ethernet</b>	IEEE 802.3af (15.4 W)	IEEE 802.3at (25.5 W)	IEEE 802.3at (25.5 W)	IEEE 802.3at (25.5 W) TS 2.2 puntos
<b>Ethernet Ports</b>	5 GE RJ45 Ports (WAN + LAN)	5 GE RJ45 Ports (WAN + LAN)	5 GE RJ45 Ports (WAN + LAN), 1GE SFP Port	5 GE RJ45 Ports, 1 GE SFP Port TS 2.4 puntos
<b>Bluetooth</b>			Maximum Transmit Power 10 dBm Frequency 2.4 GHz	Maximum Transmit Power 10 dBm Frequency 2.4 GHz
<b>GPS Antenna Port</b>	Yes	Yes	Yes	Yes
<b>Mounting Options</b>	Wall Mount / Desktop	Wall Mount / Desktop	Wall Mount / Desktop	Wall Mount / Desktop TS 2.3 puntos
<b>Type</b>	Indoor	Indoor	Indoor	Indoor
<b>Dimensions</b>				
<b>Height x Width x Length</b>	1.57 x 6.3 x 6.3 (not including antenna length)	1.49 x 6.22 x 6.22 (not including antenna length)	1.83 x 7.48 x 7.83 (not including antenna length)	1.77 x 7.09 x 7.09 (not including antenna length)
<b>Height x Width x Length</b>	40 x 160 x 160 (not including antenna length)	38 x 158 x 158 (not including antenna length)	46.5 x 190 x 199 (not including antenna length)	45 x 180 x 180 (not including antenna length)
<b>Weight</b>	1.2 lbs (0.55 kg)	0.90 lbs (0.41 kg)	2.06 lbs (0.933 kg)	1.1 lb (0.5 kg)
<b>Environment</b>				
<b>Power Required</b>	12V/3A	12V/3A	12V/3A	12V/3A
<b>Power Consumption</b>	9.38 W	7.55 W	14.11W	8 W
<b>Power Consumption</b>	10.99 W	9.40 W	16.05W	10 W
<b>Operating Temperature</b>	32°–104°F (0°–40°C)	32°–104°F (0°–40°C)	32°–104°F (0°–40°C)	32°–104°F (0°–40°C)
<b>Storage Temperature</b>	-4°–158°F (-20°–70°C)	-4°–158°F (-20°–70°C)	-4°–158°F (-20°–70°C)	-4°–158°F (-20°–70°C)
<b>Humidity</b>	5%–95%	5%–95%	5%–95%	5%–95%
<b>Certifications</b>				
<b>FCC</b>	FCC Part 15B, 15C, 2.1091	FCC Part 15B, 15C, 2.1091	FCC Part 15B, 15C, 2.1091	FCC Part 15B, 15C, 2.1091
<b>IC</b>	ICES-003, RSS-247, RSS-102	ICES-003, RSS-247, RSS-102	ICES-003, RSS-247, RSS-102	ICES-003, RSS-247, RSS-102
<b>CE</b>	EMC 2014/30/EU (EN 55032, EN 55024, EN 55035, EN 61000-3-2/-3; EN 301 489-1/-17/-19, Draft EN 301 489-52)  RED 2014/53/EU (EN 300 328, EN 303 413, EN 301 908-1/-2/-13, EN 62311, EN 50382, EN 50665, EN 50663, EN 62479)  LVD 2014/35/EU (EN 60950-1, EN 62368-1)	EMC 2014/30/EU (EN 55032, EN 55024, EN 55035, EN 61000-3-2/-3; EN 301 489-1/-17/-19, Draft EN 301 489-52)  RED 2014/53/EU (EN 300 328, EN 303 413, EN 301 908-1/-2/-13, EN 62311)  LVD 2014/35/EU (EN 60950-1, EN 62368-1)	EMC 2014/30/EU (EN 55032, EN 55024, EN 55035, EN 61000-3-2/-3; EN 301 489-1/-17, Draft EN 301 489-19/-52)  RED 2014/53/EU (EN 300 328, EN 303 413, EN 301 908-1/-2/-13, EN 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/-19, Draft EN 301 489-52)  RED 2014/53/EU (EN 300 328, EN 303 413, EN 301 908-1/-2/-13, EN 62311)  LVD 2014/35/EU (EN 60950-1, EN 62368-1)
<b>UL</b>	UL/CSA 60950-1, UL/CSA 62368-1	UL/CSA 62368-1	UL/CSA 62368-1	UL/CSA 62368-1
<b>CB</b>	IEC/EN 60950-1, IEC/EN 62368-1	IEC/EN 60950-1, IEC/EN 62368-1	IEC/EN 60950-1, IEC/EN 62368-1	(IEC/EN 60950-1, 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-101F-AM	FEX-101F-EA	FEX-201F-AM	FEX-201F-EA	FEX-202F-AM	FEX-202F-EA
<b>Regional Compatibility</b>						
	North America Carriers	EMEA, Brazil, some APAC Carriers	North America Carriers	EMEA, APAC Carriers	North America Carriers	EMEA, APAC Carriers
<b>Internal Modem Specifications</b>						
<b>Modem Model</b>	Quectel EM06-A	Quectel EM06-E	Sierra Wireless EM7411	Sierra Wireless EM7421	Sierra Wireless EM7411 (2x Modem)	Sierra Wireless EM7421 (2x Modem)
<b>5G NR SA and NSA</b>	—	—	—	—		
<b>4G: LTE</b>	CAT-6 FDD Bands: 2, 4, 5, 7, 12, 13, 25, 26, 29, 30, 66 TDD Bands: 41	CAT-6 FDD Bands: 1, 3, 5, 7, 8, 20, 28, 32 TDD Bands: 38, 40, 41	CAT-7 Bands: 2, 4, 5, 7, 12, 13, 14, 25, 26, 41, 42, 43, 48, 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	CAT-7 Bands: 1, 3, 7, 8, 20, 28, 32, 38, 40, 41, 42, 43
<b>3G: UMTS/HSPA+</b>	Bands: 2, 4, 5	Bands: 1, 3, 5, 8	Bands: 2, 4, 5	Bands: 1, 5, 8	Bands: 2, 4, 5	Bands: 1, 5, 8
<b>3G: WCDMA</b>	Bands: 2, 4, 5	Bands: 1, 3, 5, 8	Bands: 2, 4, 5	Bands: 1, 5, 8	Bands: 2, 4, 5	Bands: 1, 5, 8
<b>Additional Ports</b>	GPS antenna port	GPS antenna port	GPS antenna port	GPS antenna port	GPS antenna port	GPS antenna port
<b>Connector Type</b>	SMA (MAIN, AUX, GPS)	SMA (MAIN, AUX, GPS)	SMA (MAIN, AUX, GPS)	SMA (MAIN, AUX, GPS)	SMA LTE1 (MAIN, AUX, GPS) LTE2 (MAIN, AUX, GPS)	SMA LTE1 (MAIN, AUX, GPS) LTE2 (MAIN, AUX, GPS)
<b>Module Certifications</b>	FCC, IC, GCF, PTCRB	GCF, CE, NCC, RCM, ICASA	FCC, IC, GCF, PTCRB	GCF, NCC	FCC, IC, GCF, PTCRB	GCF, NCC
<b>Diversity</b>	Yes	Yes	Yes	Yes	Yes	Yes
<b>MIMO</b>	Yes	Yes	Yes	Yes	Yes	Yes
<b>GNSS Bias</b>	Yes	Yes	Yes	Yes	Yes	Yes

	FEX-211E	FEX-212F	FEX-311F	FEX-511F
<b>Regional Compatibility</b>				
	Global Carriers	Global Carriers	Global Carriers	Global Carriers TS 2.5 punktas
<b>Internal Modem Specifications</b>				
<b>Modem Model</b>	Sierra Wireless EM7565	Sierra Wireless EM7565 (2x Modem)	Quectel EM160R-GL	Quectel RM502Q-AE
<b>5G NR SA and NSA</b>	—	—		5G Sub-6 Bands: n1, n2, n3, n5, n7, n8, n12, n20, n25, n28, n38, n40, n41, n48, n66, n71, n77, n78, n79
<b>4G: LTE</b>	CAT-12 Bands: 1, 2, 3, 4, 5, 7, 8, 9, 12, 13, 18, 19, 20, 26, 28, 29, 30, 32, 41, 42, 43, 46, 48, 66  (Bands 42, 43, 46 are supported on Rev: P24254-02 and later)	CAT-12 Bands: 1, 2, 3, 4, 5, 7, 8, 9, 12, 13, 18, 19, 20, 26, 28, 29, 30, 32, 41, 42, 43, 46, 48, 66	CAT-16 FDD Bands: 1, 2, 3, 4, 5, 7, 8, 12, 13, 14, 17, 18, 19, 20, 25, 26, 28, 29, 30, 32, 66 TDD Bands: 38, 39, 40, 41, 42, 43, 46 (LAA), 48 (CBRS)	CAT-20 FDD Bands: 1, 2, 3, 4, 5, 7, 8, 12(17), 13, 14, 18, 19, 20, 25, 26, 28, 29, 30, 32, 66, 71 TDD Bands: 34, 38, 39, 40, 41, 42, 43, 48
<b>3G: UMTS/HSPA+</b>	Bands: 1, 2, 4, 5, 6, 8, 9, 19	Bands: 1, 2, 4, 5, 6, 8, 9, 19	Bands: 1, 2, 3, 4, 5, 6, 8, 19	Bands: 1, 2, 3, 4, 5, 6, 8, 19
<b>3G: WCDMA</b>	Bands: 1, 2, 4, 5, 6, 8, 9, 19	Bands: 1, 2, 4, 5, 6, 8, 9, 19	Bands: 1, 2, 3, 4, 5, 6, 8, 19	Bands: 1, 2, 3, 4, 5, 6, 8, 19
<b>Additional Ports</b>	GPS antenna port	GPS antenna port	MIMO1, MIMO2	MIMO1, MIMO2
<b>Connector Type</b>	SMA (MAIN, AUX, GPS)	SMA LTE1 (MAIN, AUX, GPS) LTE2 (MAIN, AUX, GPS)	4x SMA (MAIN, MIMO1, MIMO2, Diversity/GPS)	4x SMA (MAIN, MIMO1, MIMO2, Diversity/GPS)
<b>Module Certifications</b>	FCC, IC, CE, GCF, PTCRB	FCC, IC, CE, GCF, PTCRB	GCF, CE, PTCRB, FCC, IC, Anatel, IFETEL, SRRCC/NAL/CCC, NCC, KC, JATE/TELEC, RCM, ICASA	GCF, CE, PTCRB, FCC, IC, JATE/TELEC, RCM
<b>Diversity</b>	Yes	Yes	Yes	Yes
<b>MIMO</b>	Yes	Yes	Yes	Yes
<b>GNSS Bias</b>	Yes	Yes	Yes	Yes





## Features

	FEX-101F-AM	FEX-101F-EA	FEX-201F-AM	FEX-201F-EA	FEX-202F-AM	FEX-202F-EA	FEX-211E	FEX-212F	FEX-311F	FEX-511F
<b>Advanced Radio Technology</b>										
<b>2x2 MIMO — enables industry leading data speeds</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>4x4 MIMO — enables industry leading data speeds</b>	—	—	—	—	—	—	—	—	✓	✓ TS 2.6 puntos
<b>5G Downlink 4x4 MIMO bands: 1, 2, 3, 7, 25, 38, 40, 41, 48, 66, 77, 78, 79</b>	—	—	—	—	—	—	—	—	—	✓
<b>5G Uplink 2 x 2 MIMO Band: 41</b>	—	—	—	—	—	—	—	—	—	✓
<b>LTE Downlink 4 x 4 MIMO bands: 1, 2, 3, 4, 7, 25, 30, 32, 34, 38, 39, 40, 41, 42, 43, 48, 66</b>	—	—	—	—	—	—	—	—	—	✓
<b>LTE Downlink 4 x 4 MIMO bands: 1, 2, 3, 4, 7, 25, 30, 32, 38, 39, 40, 41, 66</b>	—	—	—	—	—	—	—	—	✓	—
<b>Receiver Equalization — improves performance in noisy and highly mobile environments</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Receiver Diversity — improves performance at cell edges and in buildings</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Dual Modem</b>	—	—	—	—	✓	✓	—	✓	—	—
<b>Advanced Software Features</b>										
<b>Connection Status</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Auto-connect</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Auto-select Network</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Data Byte Count</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Network Profile</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Self-diagnostics</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Power Management — standby and hibernate selective suspend</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>DIAG and AT Commands</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Private IP SIM Support</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>L2 Tunnel Mode via VLAN or CAPWAP for fast and flexible deployments</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Single Pane of Glass Management via FortiGate and FortiManager</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓ TS 2.7 puntos

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-101F-AM	FEX-101F-EA	FEX-201F-AM	FEX-201F-EA	FEX-202F-AM	FEX-202F-EA	FEX-211E	FEX-212F	FEX-311F	FEX-511F
<b>SIM Features</b>										
<b>Dual-SIM Support with intelligent fail-over algorithms</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓ TS 2.5 punktas
<b>SIM Size: Micro-SIM type 3FF</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>SIM Security Cover</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>IMEI printed at bottom of enclosure for ease of activation</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Carrier Certifications</b>										
<b>Verizon</b>	✓	—	!ⓘ	—	!ⓘ	—	✓	✓	Not Available	✓
<b>ATT</b>	✓	—	✓	—	✓	—	✓	✓	✓	✓
<b>PTCRB</b>	✓	—	✓	—	✓	—	✓	✓	✓	✓
<b>T-Mobile</b>	—	—	—	—	—	—	—	—	—	—
<b>Public Safety Network</b>	—	—	—	—	—	—	—	—	—	FirstNet Ready®

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.

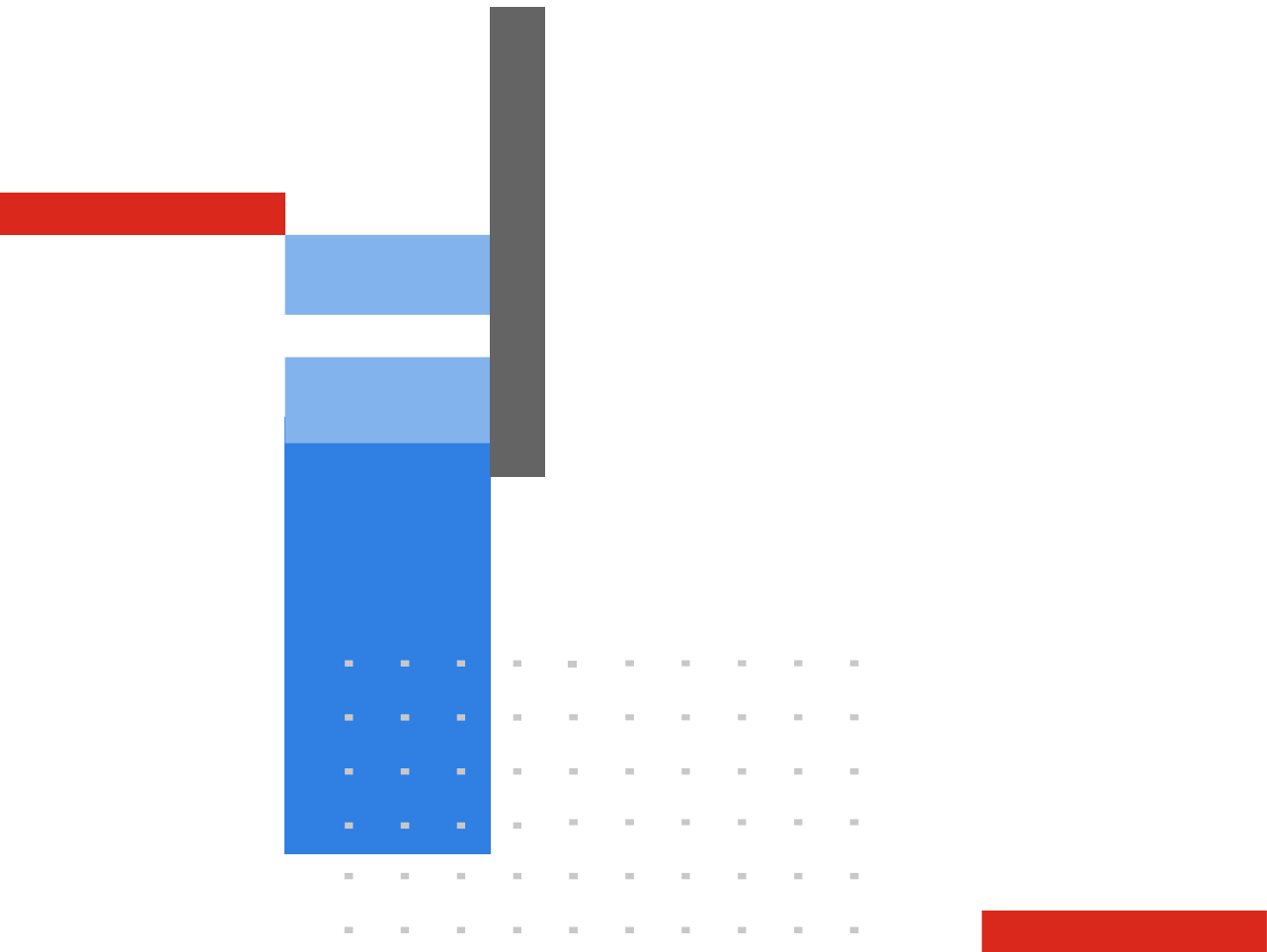
!ⓘCertifications are in progress. The following carriers are known to require additional testing to obtain certification. Please reach out to the Fortinet sales team and to evaluate your specific regional requirements: Brazil (VIVO), USA (Sprint), New Zealand, Arabian Peninsula (all carriers), and UK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



## Ordering Information

PRODUCT	SKU	DESCRIPTION
<b>3G/4G-LTE/5G Models</b>		
<b>FortiExtender 101F</b>	FEX-101F-AM	Indoor Broadband Wireless WAN Router with 1x "Dual SIM 3G/4G LTE CAT6 M.2 Module (DL/UL=300M/50Mbps)" for North America Carriers. 5x GE WAN/LAN configurable RJ45 ports including 1x 802.3af/at POE PD port and GPS/GNSS service.
	FEX-101F-EA	Indoor Broadband Wireless WAN Router with 1x "Dual SIM 3G/4G LTE CAT6 M.2 Module (DL/UL=300M/50Mbps)" for EMEA, some APAC, Brazil Carriers. 5x GE WAN/LAN configurable RJ45 ports including 1x 802.3af/at POE PD port and GPS/GNSS service.
<b>FortiExtender 201F</b>	FEX-201F-AM	Indoor Broadband Wireless WAN Router with 1x "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 1x 802.3af/at POE PD port and GPS/GNSS service.
	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 1x 802.3af/at POE PD port and GPS/GNSS service.
<b>FortiExtender 202F</b>	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 1x 802.3af/at POE PD port and GPS/GNSS service.
	FEX-202F-EA	Indoor Broadband Wireless WAN Router with 2x "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 1x 802.3af/at POE PD port and GPS/GNSS service.
<b>FortiExtender 211E</b>	FEX-211E	Indoor Broadband Wireless WAN Extender with 1 x Dual SIM 3G/4G/LTE CAT12 global modem, 5 x GE WAN/LAN configurable RJ45 ports including 1x 802.3af/at POE PD port and GPS port.
<b>FortiExtender 212F</b>	FEX-212F	Indoor Broadband Wireless WAN Extender with 2x Dual SIM 3G/4G/LTE CAT12 global modem, 5 x GE WAN/LAN configurable RJ45 ports including 1x 802.3at POE PD port and GPS port.
<b>FortiExtender 311F</b>	FEX-311F	Indoor Broadband Wireless WAN Router with 1x "Dual SIM 3G/4G LTE CAT16 M.2 Module (DL/UL=1Gbps/150Mbps)" for Global Carriers. 2x GE WAN (1x SFP + 1x RJ45) and 4x GE LAN RJ45 ports including 1x 802.3at POE PD port (25.5W) and GPS/GNSS service.
<b>FortiExtender 511F</b>	FEX-511F	Indoor Broadband Wireless WAN Router with 1x "Dual SIM 5G Sub-6GHz" radio for Global Carriers, with Cat20 LTE support. 5x GE WAN/LAN configurable RJ45 ports including 1x 802.3at POE PD port (25.5W) and 1x SFP port.
<b>Ethernet Models</b>		
<b>FortiExtender 200F</b>	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.
<b>FortiCare</b>		
<b>FortiCare Support</b>	FC-10-X101M-247-02-DD	24x7 FortiCare Contract for FEX-101F-AM.
	FC-10-X101A-247-02-DD	24x7 FortiCare Contract for FEX-101F-EA.
	FC-10-FA21F-247-02-DD	24x7 FortiCare for FEX-201F-AM.
	FC-10-FE21F-247-02-DD	24x7 FortiCare for FEX-201F-EA.
	FC-10-FA22F-247-02-DD	24x7 FortiCare for FEX-202F-AM
	FC-10-FE22F-247-02-DD	24x7 FortiCare for FEX-202F-EA
	FC-10-F211E-247-02-DD	24x7 FortiCare Contract for FEX-211E.
	FC-10-X212F-247-02-DD	24x7 FortiCare Contract for FEX-212F.
	FC-10-X311F-247-02-DD	24x7 FortiCare Contract for FEX-311F
	FC-10-X511F-247-02-DD	24x7 FortiCare Contract for FEX-511F.
	FC-10-F200F-247-02-DD	24x7 FortiCare Contract for FEX-200F.
<b>Accessories</b>		
<b>Power Adapter</b>	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-211E, FEX-212F, FEX-311F and FEX-511F models.
<b>Power Adapter</b>	SP-FEX12V3A-PA-1-EU	AC Power adapter with EU plug for Europe, for use with FortiExtender FEX-101F, FEX-201F, FEX-202F, FEX-211E, FEX-212F, FEX-311F and FEX-511F models.





[www.fortinet.com](http://www.fortinet.com)

Copyright © 2023 Fortinet, Inc. All rights reserved. Fortinet®, FortiGate®, FortiCare® and FortiGuard®, and certain other marks are registered trademarks of Fortinet, Inc., and other Fortinet names herein may also be registered and/or common law trademarks of Fortinet. All other product or company names may be trademarks of their respective owners. Performance and other metrics contained herein were attained in internal lab tests under ideal conditions, and actual performance and other results may vary. Network variables, different network environments and other conditions may affect performance results. Nothing herein represents any binding commitment by Fortinet, and Fortinet disclaims all warranties, whether express or implied, except to the extent Fortinet enters a binding written contract, signed by Fortinet's General Counsel, with a purchaser that expressly warrants that the identified product will perform according to certain expressly-identified performance metrics and, in such event, only the specific performance metrics expressly identified in such binding written contract shall be binding on Fortinet. For absolute clarity, any such warranty will be limited to performance in the same ideal conditions as in Fortinet's internal lab tests. Fortinet disclaims in full any covenants, representations, and guarantees pursuant hereto, whether express or implied. Fortinet reserves the right to change, modify, transfer, or otherwise revise this publication without notice, and the most current version of the publication shall be applicable.