FortiExtender™ Series

Available in

Appliance

Highlights

Improves user experience though 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 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 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.

Secure 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.


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.
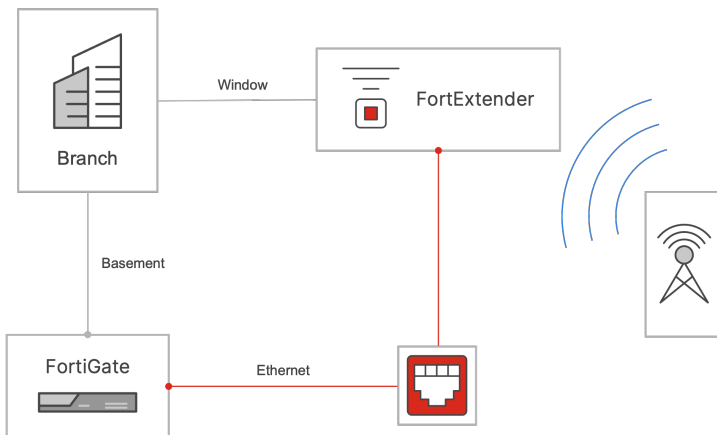
FortiExtender can be placed near a window for optimal signal strength

Deployment
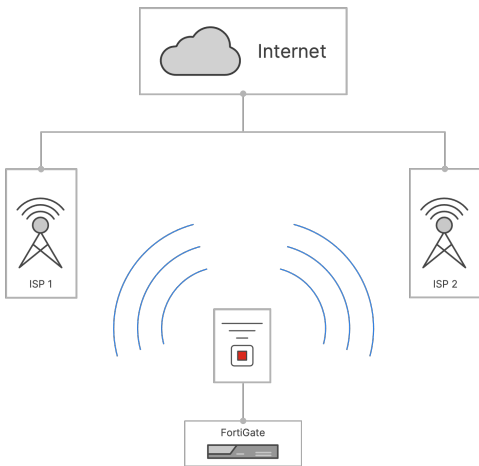
Flexible 5G/LTE Connectivity

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.

Switch between ISPs based on cost or data usage
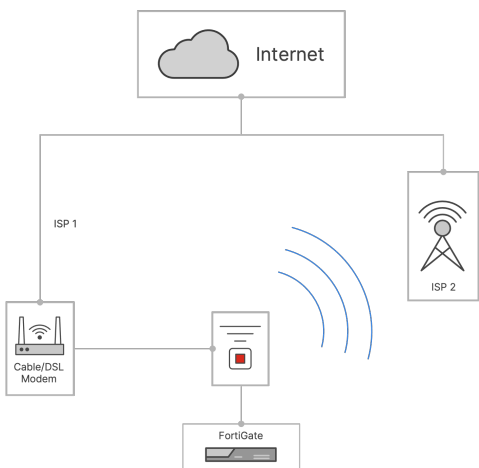
Flexible WAN Connectivity

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.

Mix LTE and Cable/DSL connections for load-balancing and/or failover
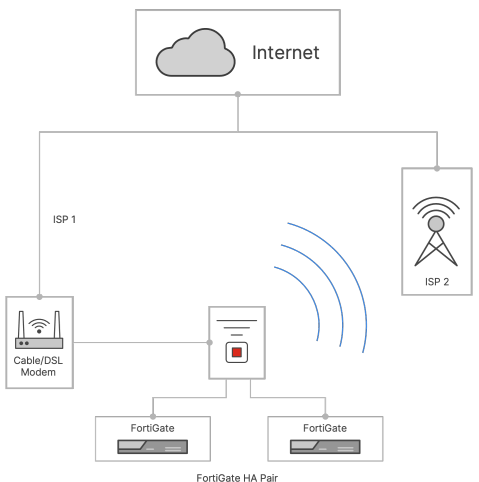
Hybrid WAN-LAN Connectivity

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.

Easily supports two FortiGates in HA mode without additional hardware

Deployment
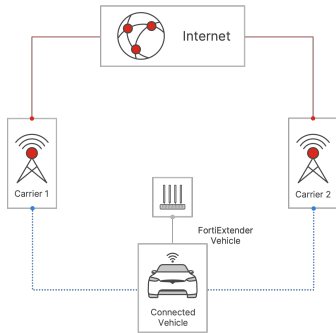
Secure Mobility

The FortiExtender portfolio includes vehicle models for secure LTE mobility. Vehicle models include embedded Wi-Fi and 7-36 volts DC power supply to securely connect your mobile fleet. FortiExtender Cloud management allows for remote provisioning and simultaneous management of thousands of mobile fleet vehicles.

Secure LAN Extension

FortiExtender gateways can be deployed at a remote location serves as an extension of the FortiGate LAN interface, connecting to a central FortiGate with a secured L2 tunnel for Layer2~Layer7 security for branch offices. FortiExtender 200F with LAN extension configuration also allows a thin edge deployment, providing a branch office connected to the LAN behind the FortiExtender with secure Internet access over a backhaul connection to FortiSASE.
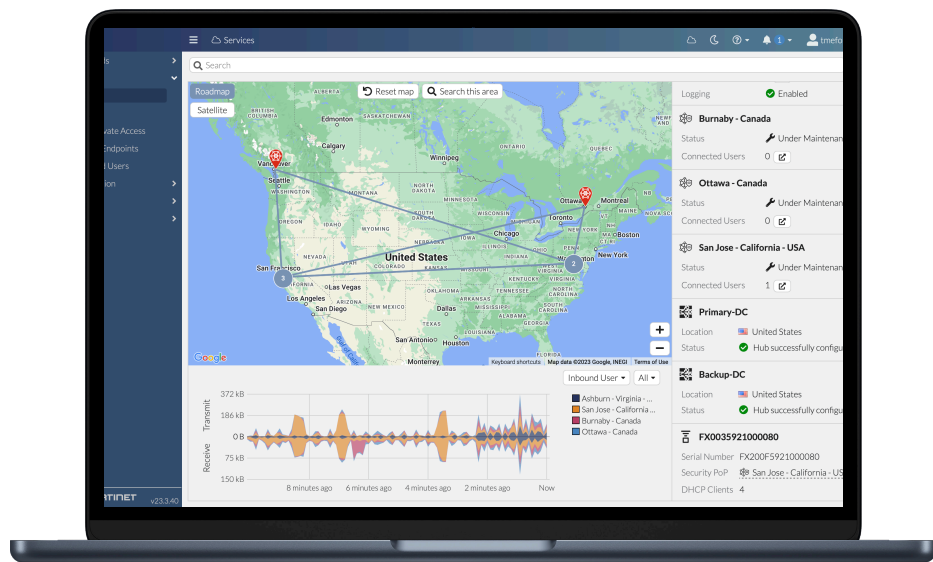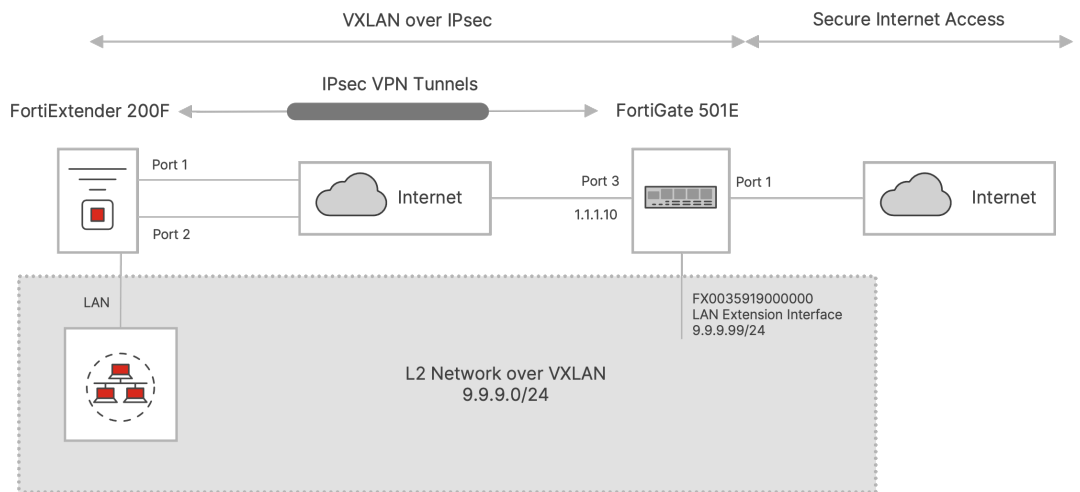
FortiExtender Remote Ethernet devices can be managed in FortiSASE, offering robust FortiGuard protection for thin branch deployments.

Hardware Specifications

	FEX-30F-WIFI	FEX-101F-AM | FEX-101F-EA	FEX-201F-AM | FEX-201F-EA
Hardware and System			
Modem Support	N/A	Internal (1x Modem)	
Number of Antennas	N/A	3 SMA External	
Power over Ethernet (PoE)Powered	IEEE 802.3at (25.5W)	IEEE 802.3af (15.4 W)	
Ethernet Ports	2x GbE RJ45 port (POE on LAN port)	5 GE RJ45 Ports (WAN + LAN)	
USB Ports	1 x USB 2.0 Type A	1 x USB 2.0 Type A	
Bluetooth	Maximum Transmit Power 10 dBm Frequency 2.4 GHz	N/A	Maximum Transmit Power 10 dBm Frequency 2.4 GHz
GPS Antenna Port	N/A	Yes	
Mounting Options	Wall Mount	Wall Mount / Desktop	
Type	Indoor	Indoor	
Dimensions			
Height x Width x Length (inches)	2.13 × 6.50 × 6.50	1.45 × 5.9 × 5.9 (not including antenna length)	1.5 × 5.9 × 5.9 (not including antenna length)
Height x Width x Length (mm)	54 × 165 × 165	37 × 150 × 150 (not including antenna length)	38 × 150 × 150 (not including antenna length)
Weight	1.54 lbs (0.70 kg)	0.81 lbs (0.37 kg)	
Environment			
Power Required	DC 12V/3A DC / PoE (at)	12V/3A	
Power Consumption (Average)	13.5 W	6.5 W	
Power Consumption (Maximum)	16.08 W	8.5 W	
Operating Temperature	32°F to 122°F (0°C to 50°C)	32°F to 104°F (0°C to 40°C)	
Storage Temperature	-22°F to 158°F (-30°C to 70°C)	-4°F to 158°F (-20°C to 70°C)	
Humidity	5% to 95%	5% to 95%	
Certifications			
FCC	Part 15, Class B and Subpart C and EICES-003	FCC Part 15B, 2.1091*	
IC	RSS-210 Issue 7, RSS-Gen Issue 2, RSS102, Issue 4	ICES-003, RSS-102*	
CE	(4.1) RR&TTE Directive 1999 / 5 / EC (4.2) EN 300 328 / EN 301 489 / EN 301 893 / EN 50385 (4.3) EU Directive 2004 / 108 / EC EMC (4.4) EU Directive 2006 /95 / EC LVD (4.5) EN 55022 / EN 55024 / EN 61000	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) **
UL	UL 60950-1, CSA C22.2 No. 60950-1-07	UL/CSA 62368-1	
CB	IEC 60950-1:2005	IEC/EN 60950-1, IEC/EN 62368-1	IEC/EN 62368-1

* Applies to AM model only.

** 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-202F-AM | FEX-202F-EA	FEX-200F	FEV-211F-AM / FEV-211F
Hardware and System			
Modem Support	Internal (2x Modem)	N/A	Internal (1x Modem)
Number of Antennas	6 SMA External	N/A	Vehicle LTE Antenna sold separately. 2x Wi-FI/1x BT antenna included.
Power over Ethernet (PoE) Powered	IEEE 802.3af (15.4 W)	N/A	No
Ethernet Ports	5 GE RJ45 Ports (WAN + LAN)	5 GbE RJ45 ports (WAN or LAN configurable)	5 GE RJ45 Ports (WAN + LAN)
USB Ports	1 x USB 2.0 Type A	1 x USB 2.0 Type A	1 x USB 2.0 Type A
Bluetooth	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	Yes	N/A	Yes
WiFi	—	—	2×2 2.4/5GHz 802.11 a/b/g/n/ac wave2 WiFi
Mounting Options	Wall Mount/Desktop	Wall Mount / Desktop	Wall mount for Vehicle/Desktop
Type	Indoor	Indoor	Indoor/In-Vehicle
Dimensions			
Height x Width x Length (inches)	1.5 × 6.22 × 6.22 (not including antenna length)	1.02 × 7.09 × 3.9	1.77 × 5.11 × 7.16 (not including antenna length)
Height x Width x Length (mm)	38 × 158 × 158 (not including antenna length)	27 × 180 × 99.9	45 × 130 × 182 (not including antenna length)
Weight	0.90 lbs (0.41 kg)	1.01 lbs (0.46 kg)	2.1 lbs (0.97kg)
Environment			
Power Required	12V/3A External Adapter/PoE(af/at)	12V/1A External Adapter	7-36V DC for 12V/24V vehicle battery system
Power Consumption (Average)	7.55W | 6.50W		17.88W
Power Consumption (Maximum)	9.40W | 8.50W	6.19 W (21.12 BTU/hr) @ -5C 6.81 W (23.24 BTU/hr) @ 50C	22.74W
Operating Temperature	32°F to 104°F (0°C to 40°C)	32°F to 104°F (0°C to 40°C)	-40°F to 158°F (-40°C to 70°C)
Storage Temperature	-4°F to 158°F (-20°C to 70°C)	-4°F to 158°F (-20°C to 70°C)	-40°F to 158°F (-40°C to 70°C)
Humidity	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, 15C, 2.1091
IC	ICES-003, RSS-247, RSS-102*	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; 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)	CE (4.1) RR&TTE Directive 1999 / 5 / EC (4.2) EN 300 328 / EN 301 489 / EN 301 893 / EN 50385 (4.3) EU Directive 2004 / 108 / EC EMC (4.4) EU Directive 2006 /95 / EC LVD (4.5) EN 55022 / EN 55024 / EN 61000
UL	UL/CSA 62368-1	UL/CSA 60950-1, UL/CSA 62368-1	Pending
CB	IEC/EN 62368-1	IEC/EN 60950-1, IEC/EN 62368-1	IEC/EN 62368-1
Ingress Protection	—	—	IP64 (dust tight and splashing water)
Rail	—	—	EN 50155 Class S1
Shock/Vibration/Humidity	—	—	MIL STD 810H, SAE J1455

* Applies to AM model only.
** Applies to EA model only.

Certification notes:

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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
Hardware and System				
Modem Support	Internal (1x Modem)	Internal (2x Modem)	Internal (1x Modem)	Internal (1x Modem)
Number of Antennas	3 SMA External	6 SMA External	4 SMA External	4 × 5G/LTE/GNSS All-in-One Antennas
Power over Ethernet (PoE) Powered	IEEE 802.3af (15.4 W)	IEEE 802.3at (25.5 W)	IEEE 802.3at (25.5 W)	IEEE 802.3at (25.5 W)
Ethernet Ports	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
USB Ports	1 x 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			Maximum Transmit Power 10 dBm Frequency 2.4 GHz	Maximum Transmit Power 10 dBm Frequency 2.4 GHz
GPS Antenna Port	Yes	Yes	Yes	Yes
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)	1.57 × 6.3 × 6.3 (not including antenna length)	1.49 × 6.22 × 6.22 (not including antenna length)	1.83 × 7.48 × 7.83 (not including antenna length)	1.77 × 7.09 × 7.09 (not including antenna length)
Height x Width x Length (mm)	40 × 160 × 160 (not including antenna length)	38 × 158 × 158 (not including antenna length)	46.5 × 190 × 199 (not including antenna length)	45 × 180 × 180 (not including antenna length)
Weight	1.2 lbs (0.55 kg)	0.90 lbs (0.41 kg)	2.06 lbs (0.933 kg)	1.1 lb (0.5 kg)
Environment				
Power Required	12V/3A	12V/3A	12V/3A	12V/3A
Power Consumption (Average)	9.38 W	7.55 W	14.11W	8 W
Power Consumption (Maximum)	10.99 W	9.40 W	16.05W	10 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	-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)	-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, 15C, 2.1091	FCC Part 15B, 15C, 2.1091
IC	ICES-003, RSS-247, RSS-102	ICES-003, RSS-247, RSS-102	ICES-003, RSS-247, RSS-102	ICES-003, RSS-247, RSS-102
CE	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/-25, EN 62311) LVD 2014/35/EU (EN 60950-1, EN 62368-1)
UL	UL/CSA 60950-1, UL/CSA 62368-1	UL/CSA 62368-1	UL/CSA 62368-1	UL/CSA 62368-1)
CB	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.

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3G/4G-LTE/5G Specifications

	FEX-101F-AM	FEX-101F-EA	FEX-201F-AM	FEX-201F-EA	FEX-202F-AM	FEX-202F-EA
Regional Compatibility						
	North America Carriers	EMEA, Brazil, some APAC Carriers	North America Carriers	EMEA, APAC Carriers	North America Carriers	EMEA, APAC Carriers
Internal Modem Specifications						
Modem Model	Quectel EM06-A	Quectel EM06-E	Sierra Wireless EM7411	Sierra Wireless EM7421	Sierra Wireless EM7411 (2x Modem)	Sierra Wireless EM7421 (2x Modem)
5G NR SA and NSA	—	—	—	—		
4G: LTE	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
3G: UMTS/HSPA+	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
3G: WCDMA	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
Additional Ports	GPS antenna port	GPS antenna port	GPS antenna port	GPS antenna port	GPS antenna port	GPS antenna port
Connector Type	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)
Module Certifications	FCC, IC, GCF, PTCRB	GCF, CE, NCC, RCM, ICASA	FCC, IC, GCF, PTCRB	GCF, NCC	FCC, IC, GCF, PTCRB	GCF, NCC
Diversity	✓	✓	✓	✓	✓	✓
MIMO	✓	✓	✓	✓	✓	✓
GNSS Bias	✓	✓	✓	✓	✓	✓

3G/4G-LTE/5G Specifications

	FEX-211E	FEV-211F-AM	FEV-211F	FEX-212F	FEX-311F	FEX-511F
Regional Compatibility						
	Global Carriers	North America Carriers	Global Carriers	Global Carriers	Global Carriers	Global Carriers
Internal Modem Specifications						
Modem Model	Sierra Wireless EM7565	Sierra Wireless EM7511 (1x Modem)	Sierra Wireless EM7565 (1x Modem)	Sierra Wireless EM7565 (2x Modem)	Quectel EM160R-GL	Quectel RM502Q-AE
5G NR SA and NSA	—	—	—	—	—	5G Sub-6 Bands: n1, n2, n3, n5, n7, n8, n12, n20, n25, n28, n38, n40, n41, n48, n66, n71, n77, n78, n79
4G: LTE	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, 14, 18, 19, 20, 26, 29, 30, 32, 41, 42, 43, 46, 48, 66	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-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
3G: UMTS/HSPA+	Bands: 1, 2, 4, 5, 6, 8, 9, 19	Bands: 1, 2, 4, 5, 6, 8, 9, 19	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
3G: WCDMA	Bands: 1, 2, 4, 5, 6, 8, 9, 19	Bands: 1, 2, 4, 5, 6, 8, 9, 19	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
Additional Ports	GPS antenna port	GPS antenna port	GPS antenna port	GPS antenna port	MIMO1, MIMO2	MIMO1, MIMO2
Connector Type	SMA (MAIN, AUX, GPS)	SMA LTE (MAIN, AUX, GPS)	SMA LTE (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)
Module Certifications	FCC, IC, CE, GCF, PTCRB	FCC, IC, GCF, PTCRB	(1) CB IEC 60950-1:2005 (2) UL UL 60950-1, CSA C22.2 No. 60950-1-07 (3) FCC FCC Part 15, Class B and Subpart C and EICES-003 (4) CE (4.1) RR&TTE Directive 1999 / 5 / EC (4.2) EN 300 328 / EN 301 489 / EN 301 893 / EN 50385 (4.3) EU Directive 2004 / 108 / EC EMC (4.4) EU Directive 2006 /95 / EC LVD (4.5) EN 55022 / EN 55024 / EN 61000 (5) IC (5.1) Canada RSS-210 Issue 7 / Canada RSS-Gen Issue 2 (5.2) RSS102, Issue 4 (6) Directives Low Voltage Directive RoHS	FCC, IC, CE, GCF, PTCRB	GCF, CE, PTCRB, FCC, IC, Anatel, IFETEL, SRRC/ NAL/CCC, NCC, KC, JATE/ TELEC, RCM, ICASA	GCF, CE, PTCRB, FCC, IC, JATE/TELEC, RCM
Diversity	✓	✓	✓	✓	✓	✓
MIMO	✓	✓	✓	✓	✓	✓
GNSS Bias	✓	✓	✓	✓	✓	✓

Features

	FEX-30F-WIFI	FEX-101F (AM/EA)	FEX-201F (AM/EA)	FEX-202F (AM/EA)	FEX-211E	FEV-211F (AM) / FEV-211F	FEX-212F	FEX-311F	FEX-511F
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: 1, 2, 3, 7, 25, 38, 40, 41, 48, 66, 77, 78, 79	—	—	—	—	—	—	—	—	✓
5G Uplink 2 × 2 MIMO Band: 41	—	—	—	—	—	—	—	—	✓
LTE Downlink 4 × 4 MIMO bands: 1, 2, 3, 4, 7, 25, 30, 32, 34, 38, 39, 40, 41, 42, 43, 48, 66	—	—	—	—	—	—	—	—	✓
LTE Downlink 4 × 4 MIMO bands: 1, 2, 3, 4, 7, 25, 30, 32, 38, 39, 40, 41, 66	—	—	—	—	—	—	—	✓	—
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 WiFi Support	—	—	—	—	—	✓	—	—	—
2×2 2.4G/5GHz concurrent WiFi6 (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 type 3FF	—	✓	✓	✓	✓	✓	✓	✓	✓
SIM Security Cover	—	✓	✓	✓	✓	✓	✓	✓	✓
IMEI printed at bottom of enclosure for ease of activation	—	✓	✓	✓	✓	✓	✓	✓	✓
Carrier Certifications									
Verizon	—	✓*	✓*	✓*	✓	!	✓	Not Available	✓
ATT	—	✓*	✓*	✓*	✓	!	✓	✓	✓
PTCRB	—	✓*	✓*	✓*	✓	✓	✓	✓	✓
T-Mobile	—	Not Required	✓*	✓*	Not Required	Not Required	Not Required	Not Required	✓
Public Safety Network	—	—	—	—	—	FirstNet Capable	—	—	FirstNet Capable

* Applies to AM model only.

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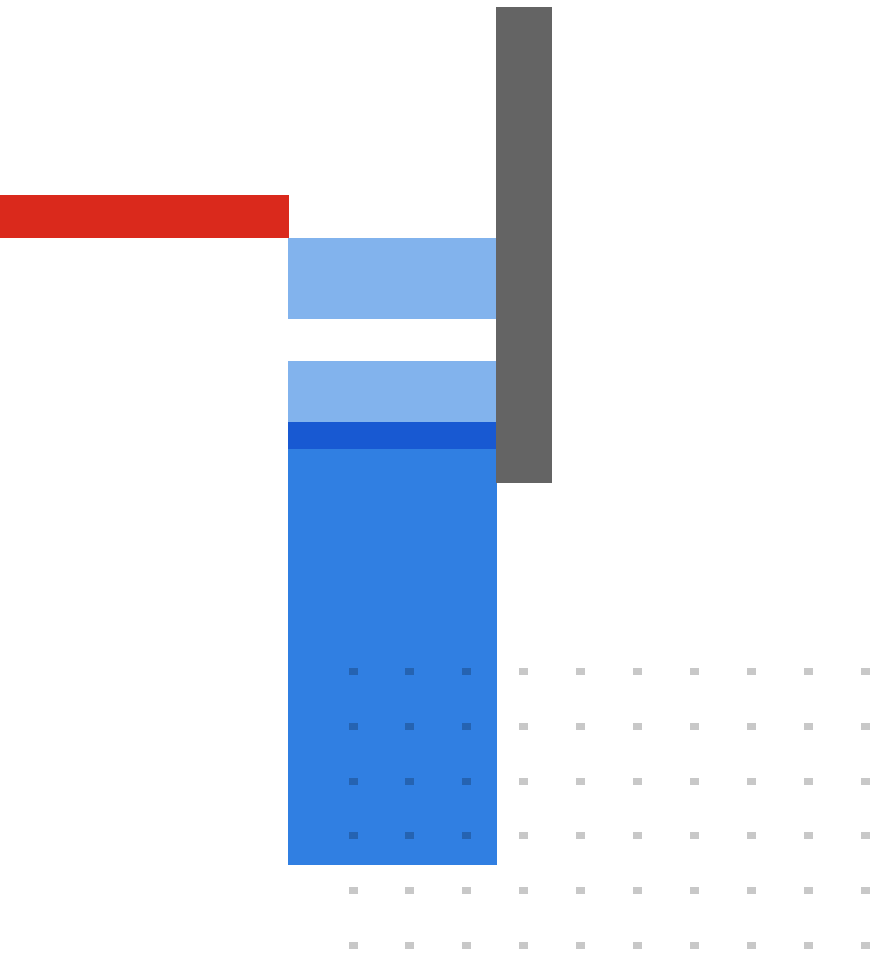
! Certifications are in progress. The following carriers are known to require additional testing to obtain certification. Please reach out to the Fortinet sales team and to evaluate your specific regional requirements: Brazil (VIVO), USA (Sprint), New Zealand, Arabian Peninsula (all carriers), and UK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

Ordering Information

PRODUCT	SKU	DESCRIPTION
3G/4G-LTE/5G Models		
FortiExtender 101F	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 1× 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 1× 802.3af/at POE PD port and GPS/GNSS service.
FortiExtender 201F	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 1× 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 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.
	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 1× 802.3af/at POE PD port and GPS/GNSS service.
FortiExtender 211E	FEX-211E	Indoor Broadband Wireless WAN Extender with 1x Dual SIM 3G/4G/LTE CAT12 global modem, 5x GE WAN/LAN configurable RJ45 ports including 1× 802.3af/at POE PD port and GPS port.
FortiExtenderVehicle 211F-AM	FEV-211F-AM	Semi-Rugged Broadband Wireless WAN Router for Vehicle and OT applications with 1x Dual SIM 3G/4G LTE CAT-12 M.2 Module (DL/UL=600M/150Mbps) for North America Carriers. 1x GE WAN + 4x GE LAN RJ45 ports including 802.11ac Wi-Fi and GPS/GNSS Service. External LTE antenna required. Wi-Fi Region A.
FortiExtenderVehicle 211F	FEV-211F	Semi-Rugged Broadband Wireless WAN Router for Vehicle and OT applications with 1x Dual SIM 3G/4G LTE CAT-12 M.2 Module (DL/UL=600M/150Mbps) for EU/APEC,/LATAM Carriers. 1x GE WAN + 4x GE LAN RJ45 ports including 2×2 2.4/5GHz 802.11ac Wi-Fi and GPS/GNSS systems. External LTE antenna required (not included). Band28 Supported, but not Band14.
FortiExtender 212F	FEX-212F	Indoor Broadband Wireless WAN Extender with 2x Dual SIM 3G/4G/LTE CAT12 global modem, 5x GE WAN/LAN configurable RJ45 ports including 1× 802.3at POE PD port and GPS port.
FortiExtender 311F	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 1× 802.3at POE PD port (25.5W) and GPS/GNSS service.
FortiExtender 511F	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 1× 802.3at POE PD port (25.5W) and 1x SFP port.
WiFi Models		
FortiExtender 30F-WiFi	FEX-30F-WiFi	A desk/wall mount LAN extension device — 2×2 2.4G/5GHz concurrent WiFi6 (802.11ax), internal antennas, 2x GbE ports (1x WAN, 1x LAN), 1x USB3.0, 1x RJ45 console port and 1x BLE. Wall mount kit included.
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-X101M-247-02-DD	24×7 FortiCare Contract for FEX-101F-AM.
	FC-10-X101A-247-02-DD	24×7 FortiCare Contract for FEX-101F-EA.
	FC-10-FA21F-247-02-DD	24×7 FortiCare for FEX-201F-AM.
	FC-10-FE21F-247-02-DD	24×7 FortiCare for FEX-201F-EA.
	FC-10-FA22F-247-02-DD	24×7 FortiCare for FEX-202F-AM.
	FC-10-FE22F-247-02-DD	24×7 FortiCare for FEX-202F-EA.
	FC-10-F211E-247-02-DD	24×7 FortiCare Contract for FEX-211E.
	FC-10-FV21F-247-02-DD	24×7 FortiCare for FEV-211F and FEV-211F-AM.
	FC-10-FG21F-247-02-DD	FortiCare Premium Support.
	FC-10-FG21F-210-02-DD	Next Calendar Day Delivery Priority RMA Service (Requires FortiCare Premium or FortiCare Elite).
	FC-10-X212F-247-02-DD	24×7 FortiCare Contract for FEX-212F.
	FC-10-X311F-247-02-DD	24×7 FortiCare Contract for FEX-311F.
	FC-10-X511F-247-02-DD	24×7 FortiCare Contract for FEX-511F.
	FC-10-F200F-247-02-DD	24×7 FortiCare Contract for FEX-200F.
Accessories		
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-211E, FEX-212F, FEX-311F and FEX-511F models.
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-211E, FEX-212F, FEX-311F and FEX-511F models.
Power Adapter	SP-FAP400-PA-AU	AC Power Adapter for FEX-101F, FEX-201F, FEX-202F, FEX-211E, FEX-212F, FEX-311F, FEX-511F. Also applicable to certain FortiAP models.
Vehicle Mount LTE Antenna	FANT-3IN1-TG-5M-FEV	3-in-1 permanent vehicle roof mount antenna for FEV-211F and FEV-211F-AM. Outdoor waterproof antenna with 2× 5G/LTE + 1x active GNSS and 5 meter antenna cable with SMA male connectors.
PoE Injector	GPI-115	IEEE 802.3af-compliant single-port, mid-span, with 15.4 Watt Gigabit Ethernet (GE) PoE.
PoE Injector	GPI-130	IEEE 802.3af-compliant single-port, mid-span, with 30 Watt Gigabit Ethernet (GE) PoE.