DATA SHEET

FortiExtender™

Available in:

Appliance

Extend Connectivity and Improve Network Availability

The enterprise is expanding and growing more distributed, requiring new methods for achieving scalable and resilient LTE and LAN connectivity. For example, Wireless WAN technology not only being used as a backup for wired WAN connections but also as the primary WAN connection in locations such as retail pop-up stores, Point of Sale (PoS) systems, and kiosks.

In addition, new converged security and networking as a service offerings, such as SASE, are in high demand but require better ways of connecting distributed light branch offices to support these services. Whatever the network access challenge, be it redundant LTE or LAN connectivity, FortiExtender offers a solution.

Security Fabric Integration

Integration with FortiGate provides a single pane of glass management of the wired and wireless WAN connections and security which reduces Total Cost of Ownership for your WAN and improves manageability of remote connections in your network.

Designed for Optimal Signal Strength

LTE models can be placed to maximize LTE signal strength (via Ethernet up to 100m from the FortiGate appliance or network switch) without using lossy antenna cables or limited strength USB modems.

Simplified Management Options

Manage your FortiExtender from the FortiGate or the cloud. FortiExtender Cloud offers hosted management of an unlimited number of FortiExtenders anywhere in the world.

Highlights

- Supports high levels of redundancy
- Extends FortiGate reachability and breadth of deployment options by providing secure remote LAN access or LTE connectivity
- The E Series provides a primary WAN link for retail POS, remote ATMs, and remote kiosk type systems
- The E Series reduces WAN TCO through a single pane of glass management integration with the FortiGate Network Security Platform
- Simplifies deployment and monitoring with cloud-based management availability, ideal for large-scale, geographically dispersed locations
- Four LAN ports enable connectivity and networking for remote locations
- The E Series is PoE powered

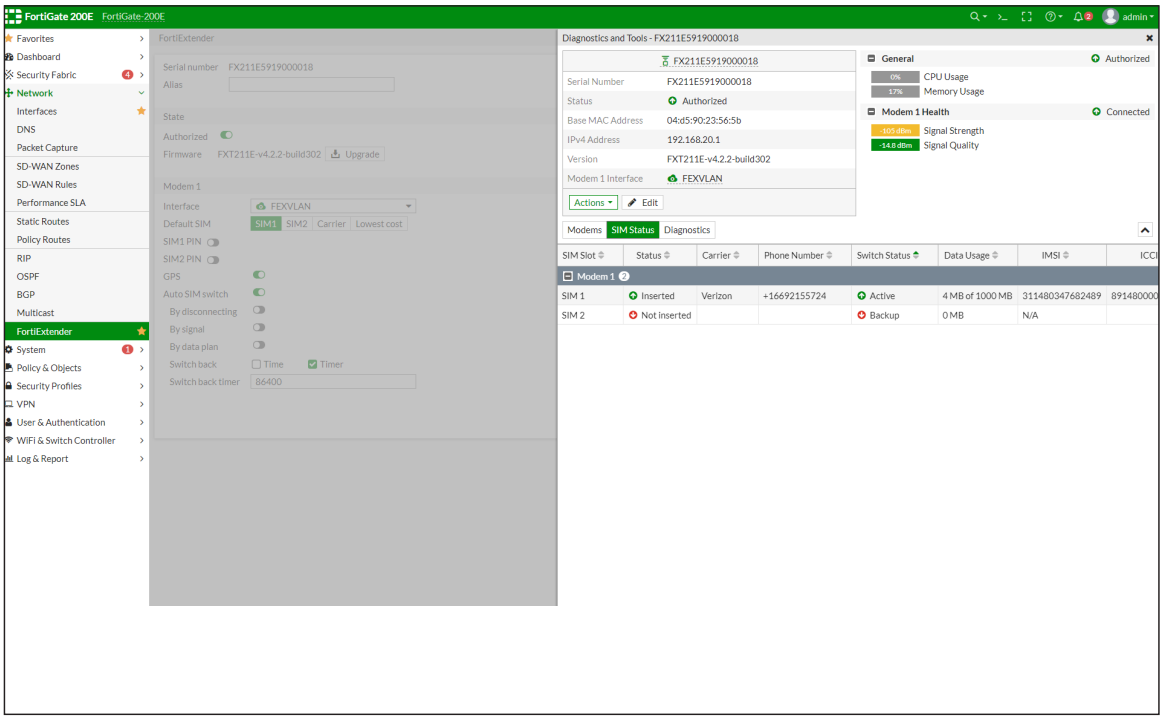
FEATURES

Superior Management, Security, and Control

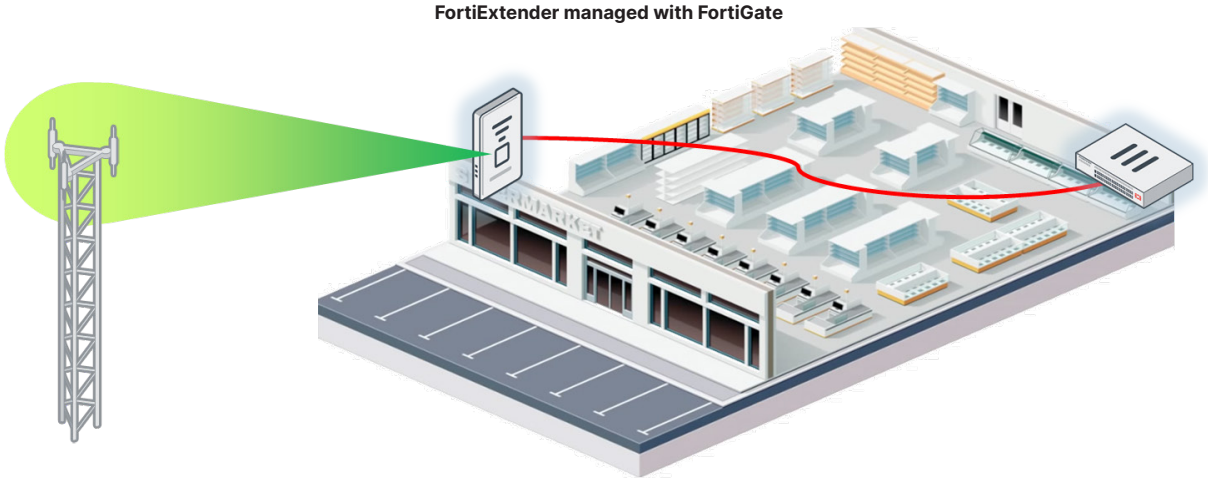
FortiExtenders are a true plug-and-play device. Once connected to the FortiGate, they appear as a regular network interface in FortiOS, providing a single pane of glass management. This enables administrators to manage the connection as well as implement complete UTM security and control, just like any other FortiGate interface. In addition, FortiOS will display data quota usage on the Wireless WAN or LAN interface, providing complete visibility of the connection to ensure costly carrier data limits are not exceeded. Additional management options are also available with FortiExtender Cloud. The superior management, security, and control of the FortiExtender ultimately reduces the Total Cost of Ownership for your WAN and LAN network.

Flexible Deployment for Optimal Signal Strength

FortiExtender LTE Wireless WAN Extender enables stable connection to support diverse applications with a high-level of redundancy using a single LTE modem platform with redundant SIM cards. FortiExtender appliances have been engineered to be installed in the best possible location to achieve the maximum LTE wireless signal strength. With exception to the non-LTE FortiExtender 200F, all LTE units are powered using Power over Ethernet, enabling the device to be located for optimal signal strength, even up to 100m away from the FortiGate or Network Switch.



FortiExtender managed with FortiGate

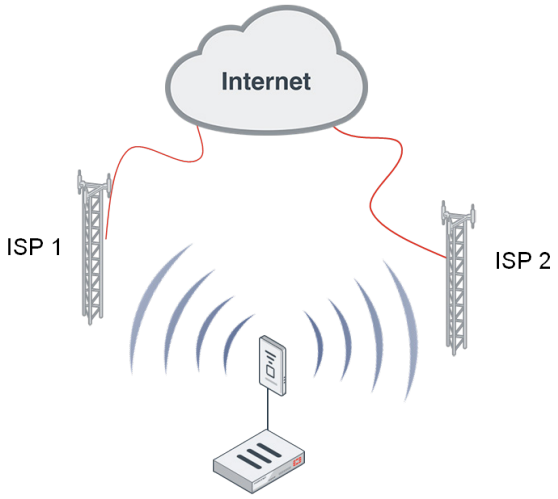


FortiExtender can be placed near a window for optimal signal strength.

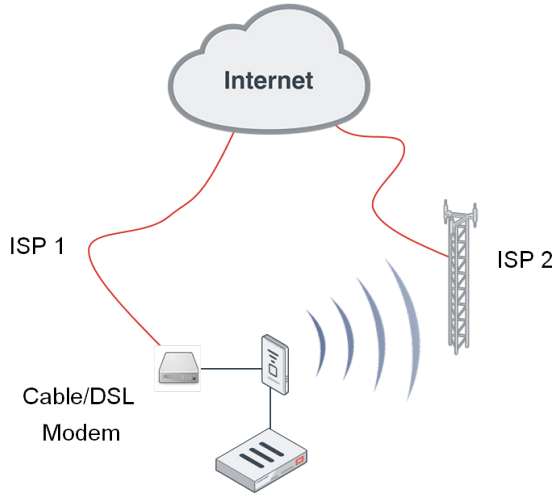
FEATURES

Flexible LTE Connectivity

The FortiExtender family of LTE appliances all support dual SIM cards per radio enabling the option of using two different ISPs for LTE connectivity. While only one SIM card can be active on any radio, the dual SIM option enables you to switch between ISPs to optimize your connectivity and minimize your costs. For example, you can configure the FortiExtender to utilize the link from ISP A until a certain data usage threshold is reached. At that point, FortiExtender can automatically shift over to ISP B and use that LTE connection. Additional conditions can be set to shift the connection between the two SIM cards, all to enable the optimal balance of connectivity and cost.



Switch between ISPs based on cost or data usage



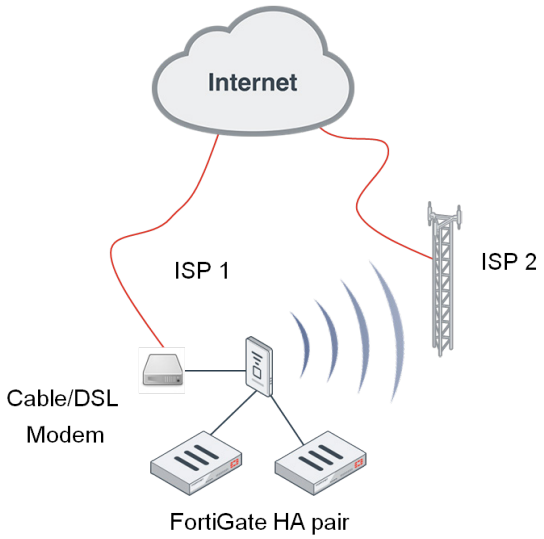
Mix LTE and Cable/DSL connections for load-balancing and/or failover

Flexible WAN Connectivity

FortiExtender offers new WAN connectivity options with an Ethernet WAN port, in addition to the LTE WAN link. 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

The FortiExtender 200F is the first LAN-only product to be added to the FortiExtender line, supporting a cost-effective means of rolling out Secure Access Service Edge (SASE) to thin edge networks via Ethernet if LTE is not desired. Additionally, the 200 series of FortiExtender offers four LAN Ethernet ports. Ideal for High Availability (HA) pairs of FortiGates, each FortiGate can be directly connected to the FortiExtender.



Easily supports two FortiGates in HA mode without additional hardware

HARDWARE SPECIFICATIONS

	FEX-201E	FEX-211E
Hardware and System		
Modem Support	Internal (1x Modem)	
Number of Antennas	3 SMA External	
Power over Ethernet (PoE) Powered	IEEE 802.3af (15.4 W)	
Ethernet Ports	5 GE RJ45 Ports (WAN + LAN)	
Bluetooth	Maximum Transmit Power 9.98 dBm Frequency 2.4 GHz	
GPS Antenna Port	Yes	
Mounting Options	Wall Mount / Desktop	
Type	Indoor	
Dimensions		
Height x Width x Length (inches)	1.57 × 6.3 × 6.3 (not including antenna length)	
Height x Width x Length (mm)	40 × 160 × 160 (not including antenna length)	
Weight	1.2 lbs (0.55 kg)	
Environment		
Power Required	12V/2A External Adapter/PoE(af)	
Power Consumption (Average)	9.38 W	
Power Consumption (Maximum)	10.99 W	
Operating Temperature	32–104°F (0–40°C)	
Storage Temperature	-4–158°F (-20–70°C)	
Humidity	5–95%	
Certifications		
FCC	FCC Part 15B, 15C, 2.1091	
IC	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)	
UL	UL/CSA 60950-1, UL/CSA 62368-1	
CB	IEC/EN 60950-1, IEC/EN 62368-1	

3G/4G LTE SPECIFICATIONS

	FEX-201E	FEX-211E
Regional Compatibility		
	North and South America and EMEA Carriers, and some APAC Carriers	Global Carriers
Internal Modem Specifications		
Modem Model	Sierra Wireless EM7455	Sierra Wireless EM7565
LTE	CAT-6	CAT-12
4G: LTE	Bands: 1, 2, 3, 4, 5, 7, 8, 12, 13, 20, 25, 26, 29, 30, 41	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)
3G: UMTS/HSPA+	Bands: 1, 2, 3, 4, 5, 8	Bands:1,2,4,5,6,8,9,19
3G: WCDMA	Bands: 1, 2, 3, 4, 5, 8	Bands:1,2,4,5,6,8,9,19
2G: CDMA 1xRTT/EV-DO Rev A	N/A	
2G: GSM/GPRS/EDGE	N/A	
Additional Ports	GPS antenna port	
Connector Type	SMA (MAIN, AUX, GPS)	
Module Certifications	FCC, IC, CE	
Diversity	Yes	
MIMO	Yes	
GNSS Bias	Yes	
XLTE (band bonding)	Yes	
Advanced Radio Technology	2×2 MIMO — Enables industry leading data speeds Receiver Equalization — Improves performance in noisy and highly mobile environments Receiver Diversity — Improves performance at cell edges and in buildings	
Advanced Software Features	Connection status	
	Auto-connect	
	Auto-select network	
	Data byte count	
	Network profile	
	Self-diagnostics	
	Power management — Standby & hibernate selective suspend	
	DIAG & AT Commands	
	IMEI located on outer box and device for simple activation by Verizon	
	Private IP SIM support	
	L2 and L3 Tunnel modes via VLAN, VxLAN, and 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	
Carrier Certifications	Verizon	
	ATT	
	PTCRB	

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).

ORDER INFORMATION

Product	SKU	Description
FortiExtender 201E	FEX-201E	Indoor Broadband Wireless WAN Extender with 1x Dual SIM 3G/4G LTE CAT6 modem for North/South America and Europe Carriers, and some APAC Carriers. 5x GE WAN/LAN configurable RJ45 ports including 1x 802.3af/at POE PD port and GPS port.
FortiExtender 211E	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 1× 802.3af/at POE PD port and GPS port.
FortiCare Support	FC-10-F201E-247-02-DD	24×7 FortiCare Contract for FEX-201E.
	FC-10-F211E-247-02-DD	24×7 FortiCare Contract for FEX-211E.
Power Adapter	SP-FAP400-PA	AC power adapter for use with FEX-201E and FEX-211E models.