

# FortiExtender™

FortiExtender 201E and 211E

Enterprises are increasingly taking advantage of wireless WAN technology not only as a backup for their wired WAN connections but also as the primary WAN connection in locations such as: small branch offices, retail “pop-up” stores, Point of Sale systems and kiosks. **A FortiExtender 3G/4G LTE Wireless WAN Extender enables a reliable and stable connection to support these applications.**



## 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.



## Designed for Optimal Signal Strength

Can be located to maximize 3G/4G LTE signal strength (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

- Enables placement of 3G/4G LTE Wireless modem close to a window, improving signal strength
- Provides a secondary failover WAN link to improve business continuity
- Provides a primary WAN link for retail POS, remote ATMs and remote kiosk type systems
- Reduces WAN TCO through a single pane of glass management integration with the FortiGate Network Security Platform
- Cloud-based management available and ideal for large-scale, geographically dispersed locations
- 4 LAN ports and basic routing enable remote connectivity and networking for remote locations
- PoE powered
- Supports single modem with multiple ISPs or dual modems with multiple ISPs

## Features

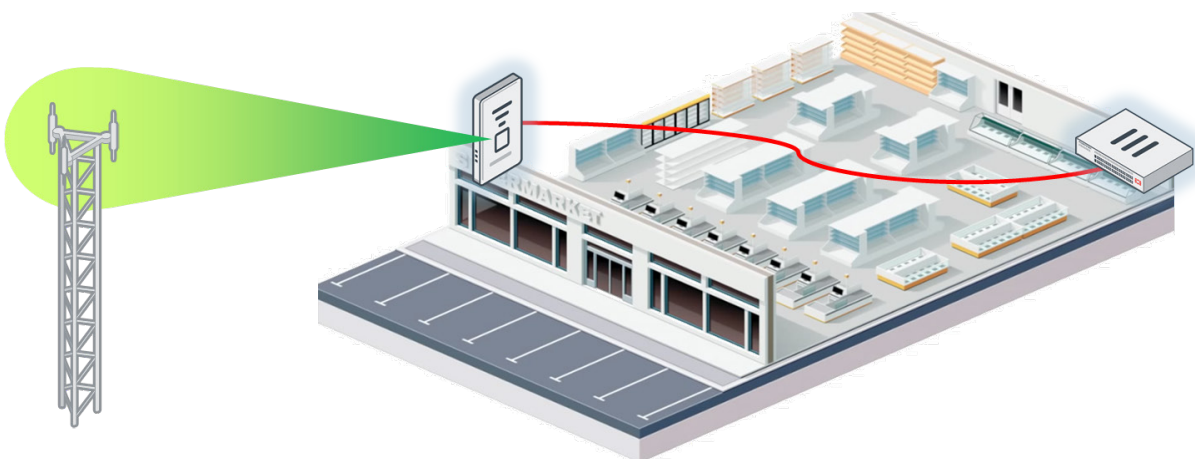
### Superior Management, Security and Control

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 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 the Total Cost of Ownership for your WAN.

### Flexible Deployment for Optimal Signal Strength

FortiExtender devices have been engineered to be installed in the best possible location to achieve the maximum 3G/4G LTE wireless signal strength. The unit is 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.

FortiOS Web-based GUI — complete FortiExtender visibility and control.

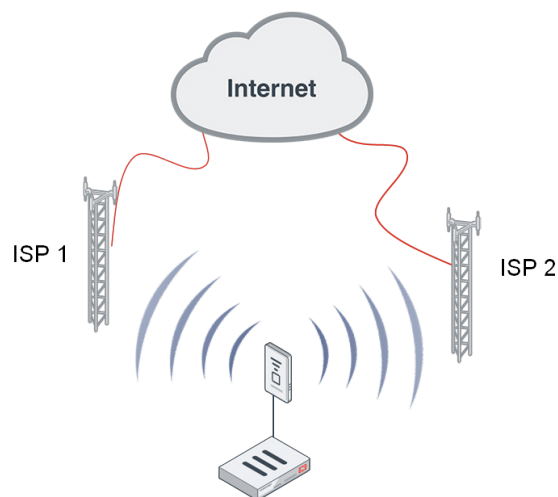


FortiExtender can be placed near a window for optimal signal strength.

## Features

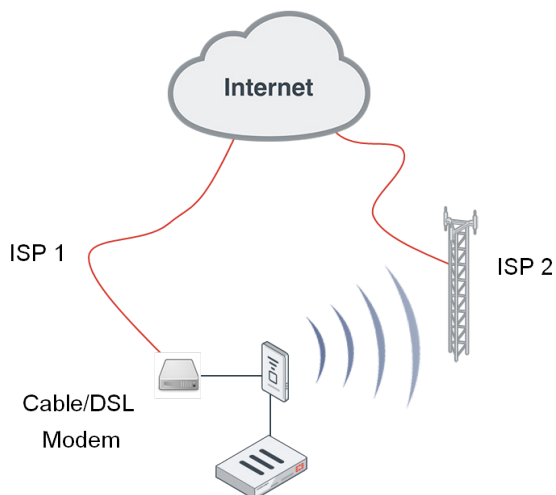
### Flexible LTE Connectivity

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

### Flexible WAN Connectivity

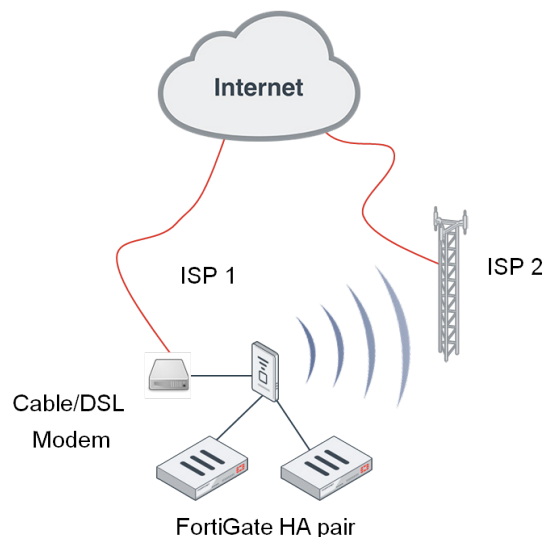


Mix LTE and Cable/DSL connections for load-balancing and/or failover

The 200 series of 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.

### Flexible LAN Connectivity

The 200 series of 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

## 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 x 6.3 x 6.3 (not including antenna length)	
Height x Width x Length (mm)	40 x 160 x 160 (not including antenna length)	
Weight	1.2 lbs (0.55 kg)	
Environment		
Power Required	12V/2A External Adapter/PoE(af)	
Power Consumption (Average/Maximum)	9.38W/10.99W	
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	

# Specifications

	FEX-201E	FEX-211E
<b>Regional Compatibility</b>	North and South America and EMEA Carriers, and some APAC Carriers	Global Carriers
<b>Internal Modem Specifications</b>		
<b>Modem Model</b>	Sierra Wireless EM7455	Sierra Wireless EM7565
<b>LTE</b>	CAT-6	CAT-12
<b>4G: LTE</b>	Bands: 1, 2, 3, 4, 5, 7, 8, 12, 13, 20, 25, 26, 29, 30, 41	Bands: 1,2,3,4,5,7,8,9,12,13,18,19,20,26,28,29,30,32,41,42,46,48,66 (Bands 42, 43, 46 are supported on Rev: P24254-02 and later)
<b>3G: UMTS/HSPA+</b>	Bands: 1, 2, 3, 4, 5, 8	Bands:1,2,4,5,6,8,9,19
<b>3G: WCDMA</b>	Bands: 1, 2, 3, 4, 5, 8	Bands:1,2,4,5,6,8,9,19
<b>2G: CDMA 1xRTT/EV-DO Rev A</b>		N/A
<b>2G: GSM/GPRS/EDGE</b>		N/A
<b>Additional Ports</b>		GPS antenna port
<b>Connector Type</b>		SMA (MAIN, AUX, GPS)
<b>Module Certifications</b>		FCC, IC, CE
<b>Diversity</b>		Yes
<b>MIMO</b>		Yes
<b>GNSS Bias</b>		Yes
<b>XLTE (band bonding)</b>		Yes
<b>Advanced Radio Technology</b>	2x2 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	
<b>Advanced Software Features</b>	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 and CAPWAP for fast and flexible deployments Single pane of glass management via FortiGate and FortiManager	
<b>SIM Features</b>	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	
<b>Carrier Certifications</b>	Verizon ATT PTCRB	
<b>Certification notes:</b>	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 1x 802.3af/at POE PD port and GPS port
	FC-10-F201E-247-02-DD	24x7 FortiCare Contract
Power Adapter	SP-FAP400-PA	AC power adapter for use with FEX-2xxE model.

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