

FortiExtender™

FortiExtender 40D and 201E

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 single pane of glass management of the wired and wireless WAN connections and security reduces Total Cost of Ownership for your WAN.



Designed for Optimal Signal Strength

Can be located indoors or outdoors 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 from 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 outdoors or 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 ATM machines and remote kiosk type systems
- Reduces WAN TCO through 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 ISP or dual modems with multiple ISP

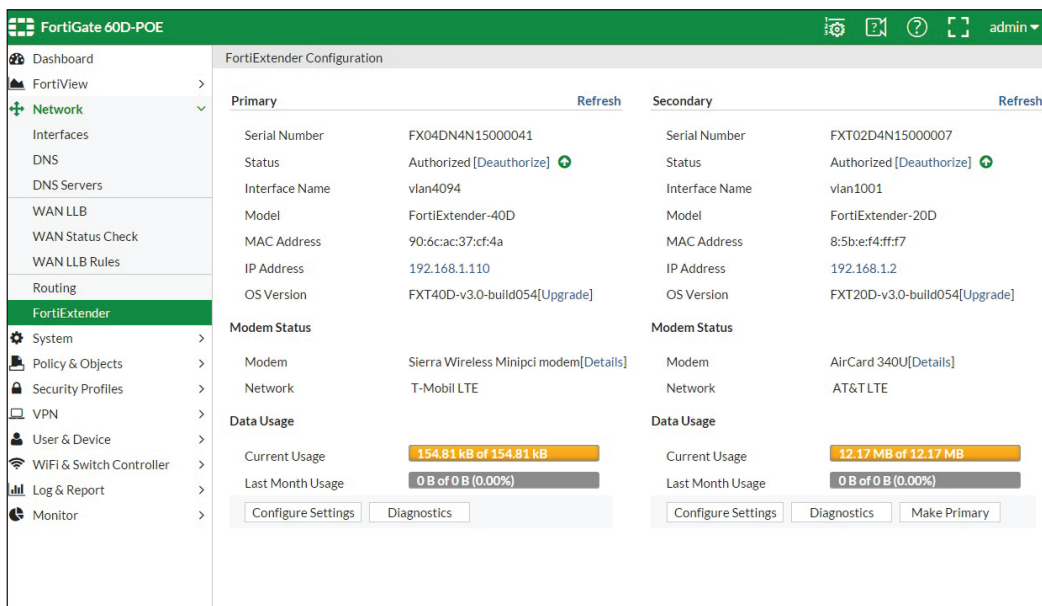
Features

Superior Management, Security and Control

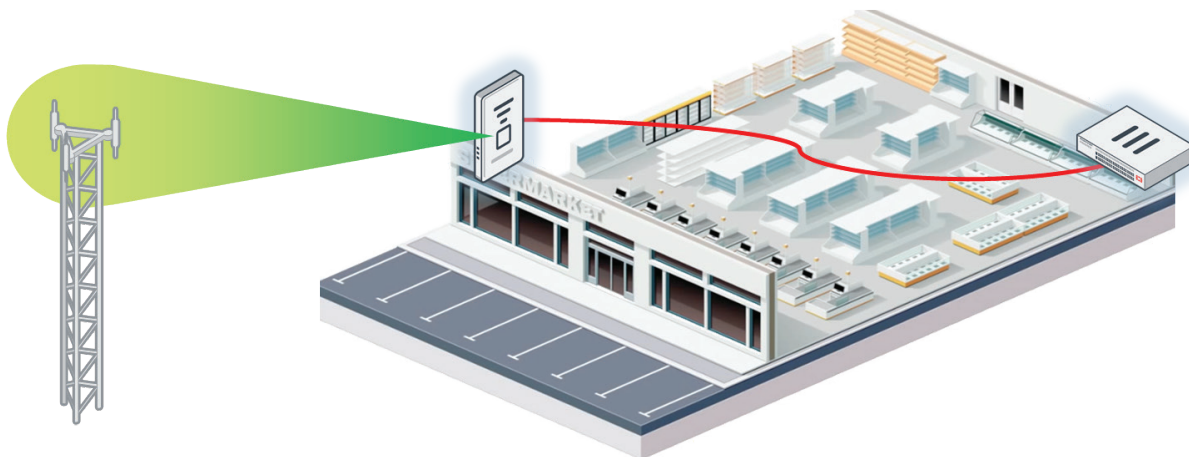
FortiExtenders are a true plug-and-play device. Once connected to the FortiGate, they appear as a regular network interface in FortiOS, providing single pane of glass management. This enables administrators to manage the connection as well as implement complete UTM security and control, just like any 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 maximum 3G/4G LTE wireless signal strength. The unit is powered using Power over Ethernet with both indoor and outdoor models available, 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.

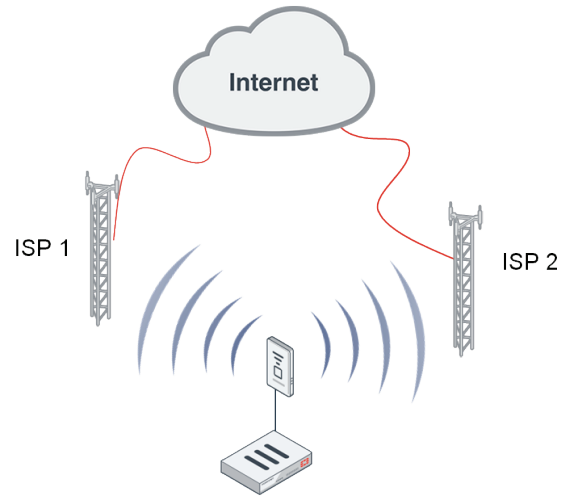


FortiExtender can be placed near a window or outdoors for optimal signal strength.

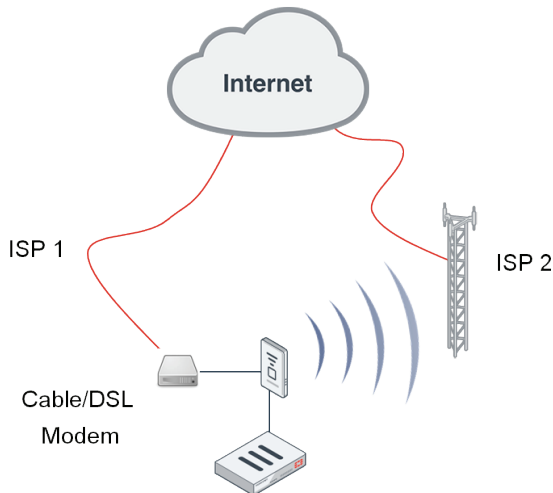
Features

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 ISP providers 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



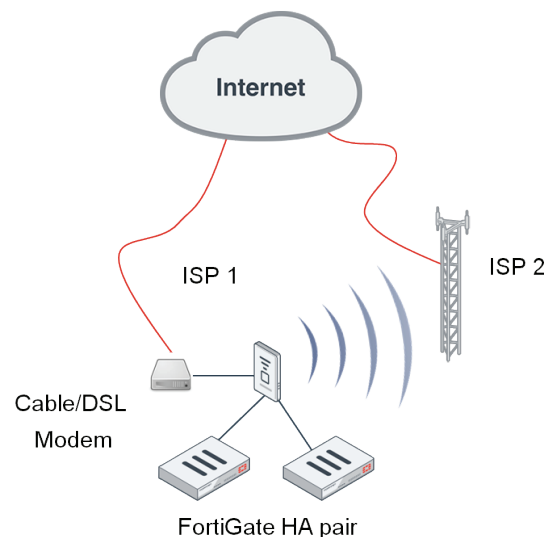
Mix LTE and Cable/DSL connections for load-balancing and/or failover

Flexible WAN Connectivity

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-40D-XXX*	FEX-201E
Hardware and System		
Modem Support	Internal	Internal (1x Modem)
Number of Antennas	3 SMA External	3 SMA External
Power over Ethernet (PoE) Powered	IEEE 802.3af (15.4 W)	IEEE 802.3af (15.4 W)
Ethernet Ports	1 GE RJ45 Port	5 GE RJ45 Ports (WAN + LAN)
GPS Antenna Port	Yes	Yes
Mounting Options	Wall Mount / Desktop	Wall Mount / Desktop
Type	Indoor	Indoor
Dimensions		
Height x Width x Length (inches)	1.75 x 7 x 6 (not including antenna length)	1.57 x 6.3 x 6.3 (not including antenna length)
Height x Width x Length (mm)	45 x 180 x 155 (not including antenna length)	40 x 160 x 160 (not including antenna length)
Weight	0.83 lb (0.38 kg)	1.2 lbs (0.55 kg)
Environment		
Operating Temperature	32–104°F (0–40°C)	32–104°F (0–40°C)
Storage Temperature	-4–158°F (-20–70°C)	-4–158°F (-20–70°C)
Humidity	5–95%	5–95%
Certifications		
CB	IEC/EN 60950-1	IEC/EN 60950-1
UL	UL/CSA 60950-1	UL/CSA 60950-1
FCC	FCC Part 15 Subpart B and ICES-003	FCC Part 15 Subpart B and ICES-003
CE	EMC 2014/30/EU (EN 55032, EN 55024, EN 61000-3-2, EN 61000-3-3) RED 2014/53/EU (EN 301 489-1, EN 301 489-52, EN 301 908-1, EN 301 908-2, EN 301 908-13, EN 303 413) LVD 2014/35/EU (IEC/EN 60950-1) RoHS2 Directive 2011/65/EU	EMC 2014/30/EU (EN 55032, EN 55024, EN 61000-3-2, EN 61000-3-3) RED 2014/53/EU (EN 301 489-1, EN 301 489-52, EN 301 908-1, EN 301 908-2, EN 301 908-13, EN 303 413) LVD 2014/35/EU (IEC/EN 60950-1) RoHS2 Directive 2011/65/EU

* see next page or specifics of 3 versions of FEX-40D



FortiExtender 40D-XXX



FortiExtender 201E

Specifications

	FEX-40D-NAM	FEX-40D-INTL	FEX-40D-AMEU	FEX-201E
Regional Compatibility	United States, Canada and Mexico	Europe, Middle East, Central America (except Mexico), South America and Australia	North and South America and EMEA Carriers	
Internal Modem Specifications				
Modem Model	Sierra Wireless EM7455	Sierra Wireless EM7305	Sierra Wireless EM7455	
LTE	CAT-6	CAT-3	CAT-6	
4G: LTE	Bands: 1, 2, 3, 4, 5, 7, 8, 12, 13, 20, 25, 26, 29, 30, 41	Bands: 1, 3, 7, 8, 20	Bands: 1, 2, 3, 4, 5, 7, 8, 12, 13, 20, 25, 26, 29, 30, 41	
3G: UMTS/HSPA+	Bands: 1, 2, 3, 4, 5, 8,	Bands: 1, 2, 5, 8	Bands: 1, 2, 3, 4, 5, 8	
3G: WCDMA	Bands: 1, 2, 3, 4, 5, 8,		Bands: 1, 2, 3, 4, 5, 8	
2G: CDMA 1xRTT/EV-DO Rev A	NA		N/A	
2G: GSM/GPRS/EDGE	NA	Quad Band 850/900/1800/1900 MHz	N/A	
Additional Ports	GPS antenna port	N/A	GPS antenna port	
Connector Type	SMA (MAIN, AUX, GPS)	SMA (MAIN, AUX)	SMA (MAIN, AUX, GPS)	
Module Certifications	FCC, PTCRB, NCC	CE, GCF, NCC, FCC	FCC, IC, CE	
Diversity	Yes	Yes	Yes	
MIMO	Yes	Yes	Yes	
GNSS Bias	Yes	Yes	Yes	
XLTE (band bonding)	Yes	No	Yes	
Advanced Radio Technology	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			
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 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: Mini-SIM type 2FF SIM size: Mini-SIM type 2FF SIM size: Mini-SIM type 2FF SIM size: Micro-SIM type 3FF SIM security cover IMEI printed at bottom of enclosure for ease of activation			
Carrier Certifications	Verizon AT&T PTCRB	Verizon AT&T PTCRB	Verizon AT&T PTCRB	Verizon

Certification notes:

In general, you can activate the FEX-40D internal modem with most worldwide carriers, then simply install a SIM card and create a wireless WAN link. 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 40D-NAM	FEX-40D-NAM	Indoor Broadband Wireless WAN Extender with embedded dual SIM 3G/4G LTE modem for North American Carriers. 1x GE RJ45 PoE port with optional 11n 300 Mbps (N300) WiFi and GPS positioning.
	FC-10-X0041-247-02-DD	24x7 FortiCare Contract
FortiExtender 40D-INTL	FEX-40D-INTL	Indoor Broadband Wireless WAN Extender with embedded dual SIM 3G/4G LTE modem for European and Australian Carriers. 1x GE RJ45 PoE port with optional 11n 300 Mbps (N300) WiFi and GPS positioning.
	FC-10-X0040-247-02-DD	24x7 FortiCare Contract
FortiExtender 40D-AMEU	FEX-40D-AMEU	Indoor Broadband Wireless WAN Extender with embedded dual SIM 3G/4G LTE CAT6 modem with LTE-advanced (Sierra Wireless EM7455) for North and South America and EMEA Carriers. 1x GE RJ45 802.3af PoE and GPS port.
	FC-10-X04DA-247-02-DD	24x7 FortiCare Contract
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. 5x 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-40D-xxxx and FEX-2xxE models.

Note: FortiExtender requires a FortiGate running FortiOS 5.2.4 or above to serve as its controller.

REGION/COUNTRY SKU SUFFIX							
Americas-FCC	China	India	Europe ETSI	Indonesia	International	Japan	Korea
-A	-C	-D	-E	-F	-I	-J	-K
Non-FFCA	Russia	Singapore	Taiwan	Ukraine	Vietnam, Thailand	World 2.4G	Egypt
-N	-P	-S	-T	-U	-V	-W	-Y

