# ZYXEL





# LTE3300 Series

Mobile technology creates opportunities for new operators to enter networking business with lower investment comparing to building fixed-line infrastructures. To fixed-line operators, mobile network is more important as a backup to offload congested bandwidth for higher customer satisfaction. Mobile network is the trend that operators can never resist. Zyxel, as a global leader of broadband networking, always stay ahead of the trend to offer the market with innovative designs.

The LTE3300 Series employs LTE — the latest mobile broadband technology with high popularity — to deliver the best possible data rates of up to 150/50 Mbps (DL/UL). With bridge and router modes embedded, the LTE3300 Series is adaptive to all kinds of devices/gateways for seamless integration with your CPE (Customer Premise Equipment) on-hand in a simple yet complete way to meet your needs.

### **Benefits**

#### Maximum freedom of mobility

As LTE markets expand quickly, base station coverage is yet to be completed. The LTE3300 Series supports single- (LTE) and multi-mode (LTE/3G/2G) so you can stay connected even of there is only 3G or 2G services. Besides, the multi-band support also relieves the concern from varied LTE/3G frequencies in different countries. The flexibility of LTE3300 Series keeps you online around the world with the maximum freedom of mobility.



3GPP release 9 category 4 with data rates of up to 150/50 Mbps (DL/UL)



Supports switching seamless between 4G, 3G and 2G/EDGE



Multiple-band is supported and varied in different countries



Supports bridge or router mode



CS-voice supported (LTE3311)

#### State-of-the-art technology

The LTE3300 Series employs 3GPP release 9, category 4 the best practice of LTE technology with 150/50 Mbps (DL/ UL) data rates. It also supports 3G/2G networks with the up-to-date "Dual Carrier HSPA+ (DC-HSPA+) technology" of 42/5.76 Mbps (DL/UL) data rates.You can enjoy ultra-fast, flexible wireless connection anywhere within LTE/3G/2G signal coverage.

#### Embedded bridge/router mode for all devices/ gateways

For network integration, Zyxel embeds both bridge and router modes into the LTE3300 Series. Users can take advantage of the built-in routing functions in all typical applications, while the bridge mode is designed to work with users' existing or preferred device such as high-end Wi-Fi Access Points, Small Business Gateways or Enterprise Gateways. With the two built-in modes, the LTE3300 Series can be easily integrated with all kinds of devices/gateways.

#### High-speed Wi-Fi of up to 300 Mbps

The LTE3300 Series comes with 802.11n Wi-Fi compatibility, so you can enjoy high-speed Wi-Fi of up to 300 Mbps without additional devices. With the true wireless connection provided by the LTE3300 Series of indoor router, there's no cabling needed for either LTE WAN or wireless LAN.

# VoIP and circuit-switched support for seamless voice migration\*

Technologies behind voice services vary by operators; some utilize the "packet-switched" method and some choose "circuit-switched". Thanks to the LTE3300 supports to both technologies, you don't have to worry about voice functions supported by your operator. You can easily migrate the voice functions to LTE3300 Series over LTE network.

\* Voice is supported on LTE3311

## **Specifications**

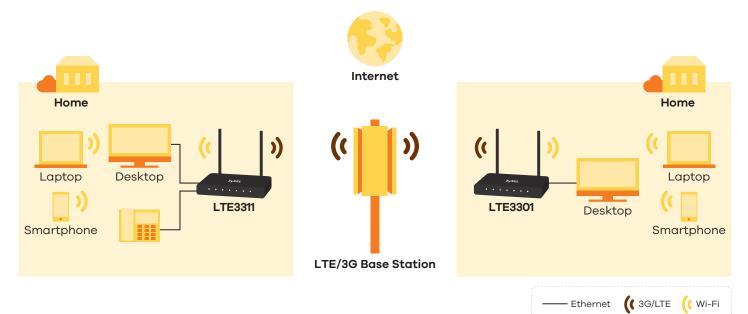
Model	LTE3301	LTE3311	
Product name	LTE Indoor Router	LTE Indoor IAD	
LTE Air Interface			
Standard	3GPP release 9, category 4	3GPP release 9, category 4	
Supported mode	Single-mode (LTE) or Multiple-mode (LTE/3G/2G)	Single-mode (LTE) or Multiple-mode (LTE/3G/2G)	
Supported frequency	Multiple-band support and varied by countries	Multiple-band support and varied by countries	
LTE antenna	2 external	2 external	
Antenna gain	Vary by different frequencies	Vary by different frequencies	
Spatial stream	2 streams (2x2)	2 streams (2x2)	
Peak data rate	150 Mbps DL within 20 MHz bandwidth; 50 Mbps UL within 20 MHz bandwidth	150 Mbps DL within 20 MHz bandwidth; 50 Mbps UL within 20 MHz bandwidth	
Wi-Fi Air Interface			
Standard	IEEE 802.11 b/g/n (2.4 GHz)	IEEE 802.11 b/g/n (2.4 GHz)	
Wi-Fi antenna	2 internal	2 internal	
Antenna gain	2 dBi	2 dBi	
Spatial stream	2 streams (2x2)	2 streams (2x2)	
Peak data rate	300 Mbps	300 Mbps	
Hardware Interface			
SIM card slot	UICC/USIM card slot x 1	UICC/USIM card slot x 1	
Power	On/off button x 1	On/off button x 1	
WPS	WPS button x 1	WPS button x 1	
Reset	Reset button x 1	Reset button x 1	
LAN port	10/100 Mbps RJ-45 x 4	10/100/1000 Mbps RJ-45 x 4	
Wi-Fi on/off	On/Off button x 1		
Phone port	-	FXS/RJ-11 x 1	
USB port		USB 2.0 Host x 1	

Model		LTE3301	LTE3311	
Hardware li	nterface			
LED		Power, Internet, LTE status, LTE signal strength, Wi-Fi status, LAN status	Power, Internet, 4G/3G/2G status, LTE signal strength, Wi-Fi status, phone status, USB status	
Power				
Power supply		110 - 240 VAC/12 VDC adaptor	110 - 240 VAC/12 VDC adaptor	
Power consumption		12 W (peak)	18 W (peak)	
IP Networki	ing			
Bridge mode		Yes	Yes	
Router mode		Yes	Yes	
Pv4/IPv6		IPv4/IPv6 dual stack	IPv4/IPv6 dual stack	
DHCP		Client/server/relay	Client/server/relay	
IP assignment		Static or dynamic IP assignment	Static or dynamic IP assignment	
VPN pass tl	hrough	PPTP/L2TP/IPSec pass through	PPTP/L2TP/IPSec pass through	
NAT		NAT server (port forwarding), max. 4096 sessions	NAT server (port forwarding), max. 4096 sessions	
QoS		Yes	Yes	
VLAN		Yes (At LAN side)	Yes (At LAN side)	
Wi-Fi Secur	rity			
WEP		64/128-bit	64/128-bit	
WPA/WPA2/WPA2-PSK		Yes	Yes	
MAC filtering		32 address supported	32 address supported	
Firewall		Yes	Yes	
Voice				
CS-voice (c	sircuit-switched)	-	3GPP TS 23.272 release 9 (support CSFB from LTE to 3G)	
SIP-voice		-	SIP (RFC 3261) v2, SDP (RFC 2327), RTP (RFC 1889), RTCP (RFC 1890) DTMF tone detection and generation On hook, off hook, and flash detection	
DTMF		-		
Telephony		-		
Telephone r	ring	-	Normal and CCSS ringing	
Voice quali	ty	-	G.168 Echo cancellation Voice Activity Detection (VAD)	
			Silence suppression Comfort Noise Generation (CNG) Dynamic jitter buffer Packet Loss Concealment (PLC)	
<u>Manageme</u>	nt		Comfort Noise Generation (CNG) Dynamic jitter buffer	
-		Secure management via Web	Comfort Noise Generation (CNG) Dynamic jitter buffer Packet Loss Concealment (PLC)	
Remote ma	inagement	Secure management via Web Over-The-Air (OTA) by HTTP/GUI or TR-069	Comfort Noise Generation (CNG) Dynamic jitter buffer	
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Remote ma Firmware u Physical Sp tem	inagement Ipgrade Decifications Dimensions (WxDxH)(mm/in.)	Over-The-Air (OTA) by HTTP/GUI or TR-069 186 x 120 x 30/7.32 x 4.72 x 1.18	Comfort Noise Generation (CNG) Dynamic jitter buffer Packet Loss Concealment (PLC) Secure management via Web Over-The-Air (OTA) by HTTP/GUI or TR-069 186 x 120 x 30/7.32 x 4.72 x 1.18	
Remote ma Firmware u Physical Sp Item	inagement ipgrade <mark>becifications</mark> Dimensions (WxDxH)(mm/in.) Weight (g/lb.)	Over-The-Air (OTA) by HTTP/GUI or TR-069 186 x 120 x 30/7.32 x 4.72 x 1.18 350/0.77	Comfort Noise Generation (CNG) Dynamic jitter buffer Packet Loss Concealment (PLC) Secure management via Web Over-The-Air (OTA) by HTTP/GUI or TR-069 186 x 120 x 30/7.32 x 4.72 x 1.18 400/0.88	
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# **Model Description**

Model	Band	LTE Frequency	
LTE3301-Q222 LTE Band 3/7/8/20/40 UMTS/HSDPA/HSUPA/HSPA DC-HSPA+ Band 1/8 GSM/GPRS/EDGE Quad-Bo	UMTS/HSDPA/HSUPA/HSPA+/	Band 3	FDD UL: 1710 - 1785 MHz; DL: 1805 - 1880 MHz
		Band 7	FDD UL: 2500 - 2570 MHz; DL: 2620 - 2690 MHz
		Band 8	FDD UL: 880 - 915 MHz; DL: 925 - 960 MHz
		Band 20	FDD UL: 832 - 862 MHz; DL: 791 - 821 MHz
		Band 40	TDD UL/DL: 2300 - 2400 MHz
LTE3311-Q222	LTE Band 3/7/8/20/40	Band 3	FDD UL: 1710 - 1785 MHz; DL: 1805 - 1880 MHz
	UMTS/HSDPA/HSUPA/HSPA+/	Band 7	FDD UL: 2500 - 2570 MHz; DL: 2620 - 2690 MHz
	DC-HSPA+ Band 1/8 GSM/GPRS/EDGE Quad-Band	Band 8	FDD UL: 880 - 915 MHz; DL: 925 - 960 MHz
		Band 20	FDD UL: 832 - 862 MHz; DL: 791 - 821 MHz
		Band 40	TDD UL/DL: 2300 - 2400 MHz

# **Application Diagram**



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Datasheet LTE3300 Series