

# LTE100

Indoor Access Point

**WILSON**  
CONNECTIVITY

## LTE100: Indoor Conductivity with LTE Range and Security

The Wilson Connectivity LTE100 provides streamlined 4G/LTE solutions for indoor business environments. This compact indoor access point delivers reliable, high-speed connectivity essential for modern office operations. Designed for easy integration with existing network infrastructure, the LTE100 allows businesses to leverage 4G/LTE capabilities with minimal disruption. It's ideally suited for enhancing mobile connectivity in corporate offices, supporting device-dense environments in co-working spaces, and enabling consistent wireless performance for business-critical applications.

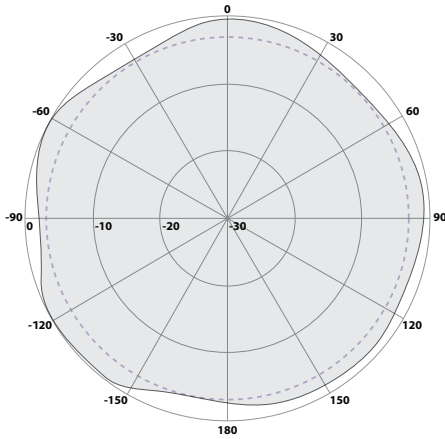


In DC mode, each carrier is treated as an independent cell, supporting 96+96 users, with each cell supporting 5, 10, 15, or 20 MHz bandwidth. Using a LTE100 in DC mode simplifies and streamlines the deployment of split sectors. This product comes with a standard one-year warranty; an extended warranty is available.

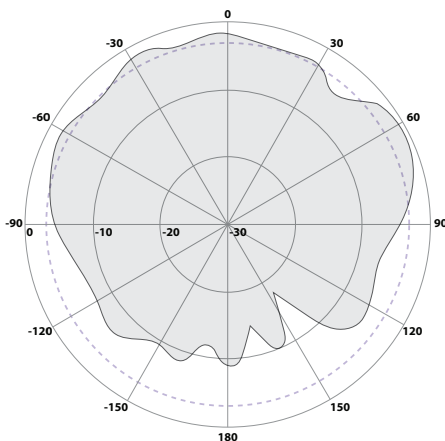
Technology	
<b>Standard</b>	LTE TDD RAN (3GPP Release 15 compliant)
<b>TDD UL/DL Configuration</b>	1, 2, 6 (with Special Subframe Configuration 7)
<b>Frequency Band</b>	B48 (3550MHz-3700MHz)
<b>Channel Bandwidth</b>	SC: 5/10/15/20MHz CA: 40MHz as maximum aggregated bandwidth
<b>Multiplexing</b>	MIMO: 2x2 (DL)
<b>Security</b>	Radio: SNOW3G/AES-128 Backhaul: IPsec (X.509 AES-128, AES-256, SHA-128, SHA-256)

\*Planned for a future release

## Antenna Pattern



### H-Pattern



### V-Pattern

## Highlights

Standard LTE TDD Band 48

GUI-based local and remote Web management

Excellent Non-Line-of-Sight (NLOS) coverage

Peak rate: Up to DL 290Mbps and UL 70 Mbps with 2x20MHz bandwidth

2CC DL/UL CA improves the spectrum efficiency of fragmented spectrum resources

Suitable for private and public deployments; any IP-based backhaul can be used, including public transmission protected by Internet Protocol Security (IPsec)

96 RRC connected users per carrier (96+96 in DC mode), upgradeable to higher capacity in future releases

Integrated small cell form factor for quick and easy installation

Configured out-of-the-box to work with The Wilson Platform

Supports Citizens Broadband Radio Service (CBRS)

Interoperable with standard LTE Evolved Packet Core (EPC)

Supports TR-069 network management interface

Interfaces	
<b>Ethernet Interface</b>	1 optical (SFP) and 1 RJ-45 Ethernet interface (1 GE)
<b>Power Supply</b>	12 VDC 2A, PoE+/48 V 0.6 A, complies with IEEE 802.3at standard
<b>Protocols Used</b>	IPv4/IPv6 (Dual Stack), UDP, TCP, ICMP, SNMPv2c, NTP, SSH, IPsec, TR-069, HTTP/HTTPs, 1588v2, DHCP
<b>VLAN/VxLAN</b>	802.IQ/VxLAN
<b>LED Indicators</b>	4 x status LED CELL1/CELL2/ALM/PWR

<b>Performance</b>				
<b>Peak Data Rate (DC)</b>	<b>2x20 MHz</b>	<b>DL (Mbps)</b>	<b>UL (Mbps)</b>	
	UL/DL Config 1	2x105	2x28	
	UL/DL Config 2	2x145	2x14	
	UL/DL Config 6	2x85	2x35	
	<b>2x10 MHz</b>	<b>DL (Mbps)</b>	<b>UL (Mbps)</b>	
	UL/DL Config 1	2x51	2x14	
	UL/DL Config 2	2x70	2x7	
	UL/DL Config 6	2x42	2x17	
	<b>Peak Data Rate (CA)</b>	<b>2x20 MHz</b>	<b>DL (Mbps)</b>	<b>UL (Mbps)</b>
UL/DL Config 1		210	56	
UL/DL Config 2		290	28	
UL/DL Config 6		170	70	
<b>2x10 MHz</b>		<b>DL (Mbps)</b>	<b>UL (Mbps)</b>	
UL/DL Config 1		102	28	
UL/DL Config 2		140	14	
UL/DL Config 6		84	34	
<b>20 MHz + 10 MHz</b>		<b>DL (Mbps)</b>	<b>UL (Mbps)</b>	
UL/DL Config 1		156	42	
UL/DL Config 2		215	21	
UL/DL Config 6		127	51	
<b>20 MHz + 15 MHz</b>		<b>DL (Mbps)</b>	<b>UL (Mbps)</b>	
UL/DL Config 1		182	49	
UL/DL Config 2		250	24	
UL/DL Config 6		148	61	
<b>User Capacity</b>		Up to 96 RRC connected users per cell (4 users per TTI) <ul style="list-style-type: none"> <li>• SC/CA: 96 RRC connected users</li> <li>• DC: 96+96 RRC connected users</li> </ul>		
<b>Latency</b>		30 milliseconds		
<b>Receive Sensitivity</b>	-100 dBm(per channel)			
<b>Modulation</b>	MCS0 (QPSK) toMCS27 (256QAM) DL: QPSK, 16QAM, 64QAM, 256QAM UL: QPSK, 16QAM, 64QAM			
<b>Transmit Power Range</b>	0 to 24 dBm per channel (combined +30 dBm, configurable) (1 dB interval)			
<b>Quality of Service</b>	Nine-level priority indicated by QoS Class Identifiers (QCI)			
<b>ARQ/HARQ</b>	Supported			
<b>Synchronization</b>	GPS, 1588v2			

<b>Modulation Levels (Adaptive)</b>		
<b>MCS</b>	<b>Modulation Scheme</b>	<b>RSRP (dBm)</b>
0-4	QPSK	$-120 \leq \text{RSRP} < -110$
5-9	16 QAM	$-110 \leq \text{RSRP} < -100$
10-19	64 QAM	$-100 \leq \text{RSRP} < -85$
20-27	256 QAM	$\text{RSRP} \geq -85$

NOTE: The information provided is for reference only as the environment can impact modulation levels.

<b>Features</b>	
<b>Voice</b>	VoLTE*
<b>NSA</b>	Supported
<b>Traffic Offload</b>	Local breakout
<b>Layer 2 Support</b>	Transparent Bridge Mode
<b>Maintenance</b>	<ul style="list-style-type: none"> <li>• Local/Remote Web maintenance</li> <li>• Online status management</li> <li>• Performance statistics</li> <li>• Fault management</li> <li>• Local/Remote software upgrade</li> <li>• Logging</li> <li>• Connectivity diagnosis</li> <li>• Automatic start and configuration</li> <li>• Alarm reporting</li> <li>• User information tracing</li> <li>• Signaling trace</li> </ul>

\* Planned for future release

<b>Link Budget</b>	
<b>RF Antenna</b>	3 dBi built-in omni antenna
<b>GPS Antenna</b>	External GPS antenna, SMA connector
<b>Maximum EIRP</b>	$33 \pm 1$ dBm
<b>Power Control</b>	UL Open-loop/Closed-loop Power Control, DL Power Allocation (3GPP TS 36.213 compliant)

Physical	
<b>MTFB</b>	≤ 150000 hours
<b>MTRR</b>	≤ 1 hour
<b>Operating Temperature</b>	23°F to 113°F / -5°C to 45°C
<b>Storage Temperature</b>	14°F to 122°F / -10°C to 50°C
<b>Humidity</b>	5%to 95%RH
<b>Atmospheric Pressure</b>	70 kPa to 106 kPa
<b>Power Consumption</b>	≤ 20W
<b>Weight</b>	3.3 lb/1.5 kg
<b>Dimensions (HxWxD)</b>	8.7 x 8.7 x 1.9 inches 220 x 220 x 48millimeters
<b>Installation</b>	Ceiling or wall mount

Global Part Numbers	
<b>P5G-API100</b>	LTE100 Indoor TDD Access Point -- LTE Release 15, 4x250mW(24 dBm), 1GE+1OPT, 3 dBi built-in antenna, 3.5 GHz (3550MHz-3700MHz), B42/43/48 <ul style="list-style-type: none"> <li>• FCC Certification: 2AG32PBS31012</li> <li>• IC Certification: 20982-PBS31010</li> </ul>