

# CPE8102

The CPE8102 is an indoor LTE CPE. The small and attractive unit offers quick and easy plug-and-play connectivity. Featuring Wi-Fi, Ethernet and Telephony functionality, the small unit offers flexibility and operates on multiple LTE bands. Paired with Telrad's BreezeCOMPACT base stations, the CPE8102 offers consistent and reliable service that is ideal for residential or small business end-users.

## Specifications

### LTE Interface

<b>Standard Compliance</b>	3GPP TD-LTE Release 9
<b>LTE UE Category</b>	Cat 5
<b>Duplex Mode</b>	TDD, 2Rx, 1Tx, DL MIMO
<b>Frequency Bands</b>	SKU1: B40 (2.3-2.4 GHz), B41 (2.5-2.7 GHz) SKU2: B42 (3.4-3.6 GHz), B43 (3.6-3.8 GHz) & 3.3-3.4 GHz
<b>Channel bandwidth</b>	5, 10, 15, 20 MHz
<b>Modulation</b>	DL: QPSK, QAM16, QAM64   UL: QPSK, QAM16, QAM64
<b>Maximum Transmit Power</b>	23 dBm
<b>Antenna</b>	4-5 dBi (B40, B41); 5-6 dBi (B42, B43, 3.3GHz)
<b>L1</b>	MIMO
<b>L2 &amp; L3</b>	Multiple APN   PLMN and Cell Selection
<b>Authentication</b>	USIM   SIM function (1.8V and 3.3V SIM and USIM card)
<b>QoS</b>	Non-GBR and GBR
<b>Device Management</b>	Web GUI and TR-069



### Wi-Fi Interface

<b>Radio Access</b>	802.11 b/g/n (2x2)
<b>Antenna</b>	3 dBi built-in antenna
<b>Connected Users</b>	32+
<b>Security</b>	64/128 bit WEP, WPA/WPA2



### CPE Specifications

<b>Dimensions (HxWxD)</b>	190 x 162 x 36 mm   7.4 x 6.3 x 1.4 in
<b>Weight</b>	0.35 kg   0.7 lbs
<b>User Interface</b>	LAN - 2 RJ45 10/100M ETH Ports Voice - 1 RJ11 Port (optional) SIM card slot (2FF)
<b>Power Source</b>	12V/1.0A DC Adapter
<b>Environmental</b>	Indoor
<b>Operating Temperature</b>	-15° to 55° C   5° to 131° F
<b>Humidity</b>	90% max non-condensing



Physical

Dimensions	190mm x 162mm x 36mm
Weight	< 350g
Power Consumption	< 12W
Power Supply	12V/1.0A DC Adapter

Environmental

Operating Temperature	-15°C--55°C
Storage Temperature	-40°C--85°C
Humidity	90% max Non-condensing

Radio Interface

Radio Access	3GPP TD-LTE Release 9
Operation Mode	TDD, 2Rx, 1Tx, DL MIMO
Frequency Band	B40, B41, B42, B43, 3.3GHz

Channel Bandwidth	5/10/15/20 MHz
Modulations	DL: QPSK, QAM16, QAM64 UL: QPSK, QAM16, QAM64

QoS Support	Non-GBR and GBR
Output Power	23 dBm
Antenna Gain	4-5 dBi (B40, B41) 5-6 dBi (B42, B43, B55)

WiFi Interface

Radio Access	802.11b/g/n (300 Mbps)
Output Power	18 ± 1dBm
Antenna	3dBi built-in antenna
Connected Users	32+
Security	64/128 bit WEP, WPA/WPA2

User Interfaces

Data Interface:	2 RJ45 10/100M ETH Port
Line Interface:	1 RJ11 Ports (optional)
LED Indicator:	SYS, WiFi, LINE, RF 1-2-3 Integrated LAN LEDs
SIM Support	SIM card slot (2FF)

Networking Configuration

Router L3 Operation Support  
 Built-in DHCP Server for LAN Devices  
 IPv4, and IPv6 DS-Lite Support for LTE  
 Multiple PDN interface support  
 NTP Service Support

Data Networking Features

GRE Tunneling Client Support

Firewall & Access Control

DMZ and Virtual Server Support  
 IP and Port Support  
 Local and Remote Management Restriction  
 Application Firewall Support  
 LAN Device Access Control

VoIP Processing

Compression	G.711	G.721	G.723
	G.726	G.729	G.722
Comfort Noise	Comfort noise generation & control		
Echo Cancellation	G.165/168-2000		
Silence Handling	Silence detection/suppression		
Fax Support	T.30 and T.38		
Delay/Jitter/Loss	Jitter and packet loss compensation		
DTMF Relay	In band DTMF, RFC2833, SIP signal		
Call Duration	24+ hours Uninterrupted Call		

Device Management

HTTP and HTTPS Management Interfaces  
 Standard TR-069 Management  
 Device Factory Default Setting

Industry Standards

ITU	
3GPP	E-UTLA Release 9
IEEE	
IEEE 802.3	10Base Ethernet
IEEE 802.3u	Fast Ethernet
IEEE 802.11	Wireless LAN (802.11b/g/n)
IETF	
IP voice	SIP v2.0