

# CPX80P

## 5G Sub-6 Outdoor CPE



CAT20

5G NR/LTE/WCDMA

Qualcomm SDX62

POE

IP67

The CPX80P from BTI WIRELESS is an Outdoor 5G CPE, supporting various 4G/5G spectrums and provides ultra-high speed experience. It has built-in high-gain directional antennas to expand the signal coverage. The CPX80P ensures quality of wireless communication for various outdoor environments in an IP67 enclosure, protecting it from water, vibration, shock, and lightning.

## KEY FEATURES

- Qualcomm SDX62 chip solution
- 5G NR and LTE-A CAT20 dual mode
- Supports both SA and NSA
- Worldwide sub-6 5G and LTE-A coverage
- Supports POE power supply, comply to 802.3at
- Powerful software features, supporting all router features
- Supports Web, TR069 and SNMP based device management
- IP67 water and dust proof
- Built-in high-gain antennas

## SYSTEM ELEMENTS



## HARDWARE SPECIFICATIONS

<b>Technical Standard</b>	WAN	5G NR/LTE/WCDMA
	LAN	IEEE 802.3/802.3u/802.3bz
<b>Cellular Bands (CPX80P – A2 Version)</b>	5G NR	n1/n3/n5/n7/n8/n20/n28/n38/n40/n41/n75/n76/n77/n78
	LTE	B1/B3/B5/B7/B8/B20/B28/B32/B38/B40/B41/B42/B43
	WCDMA	B1/B5/B8
<b>Cellular Bands (CPX80P – B2 Version)</b>	5G NR	n2/n5/n7/n12/n13/n14/n25/n26/n29/n30/n38/n41/n48/n66/n70/n71/n77/n78
	LTE	B2/B4/B5/B7/B12/B13/B14/B17/B25/B26/B29/B30/B38/B41/B42/B43/B46 (LAA) /B48/B66/B71

<b>External Port</b>	1 x RJ45 2.5Gigabit Ethernet port 1 x SIM Slot (2FF)			
<b>Antenna</b>	CPX80P – A2: 4 cellular antenna interfaces CPX80P – B2: 4 cellular antenna interfaces			
<b>LED Indicators</b>	1 x Power indicator 1 x Network status indicator 1 x Tri-color Signal strength indicators 1 x SIM status indicator			
<b>Button</b>	1 x reboot /restore button			
<b>Carrier Aggregation</b>	LTE: DL 5CA and UL 2CA NR: 2CA			
<b>Tx/Rx</b>	CPX80P-A2	2Tx/4Rx (n38/n41/n77/n78) ① 1Tx/4Rx (n1/n3/n5/n7/n8/n20/n28/n40/n75/n76)		
	CPX80P-B2	2Tx/4Rx (n38/n41/n48/n77/n78) ① 1Tx/4Rx (n2/n5/n7/n12/n13/n14/n25/n26/n29/n30/n66/n70/n71)		
<b>Maximum Transmission Power</b>	5G NR Sub 6 Bands		Class 3 (23 dBm ±2 dB)	
	n41/n77/n78 HPUE		Class 2 (26 dBm +2/-3 dB) ②	
	4G LTE		Class 3 - 23dBm	
	B38/B41/B42 HPUE		Class 2 (26 dBm ±2 dB) ②	
	WCDMA		Class 3 (23 dBm ±2 dB)	
<b>Maximum Transmit Throughput (CPX80P – A2/CPX80P – B2) ③</b>	Downlink	5G NR SA(Gigabit Ethernet port)		2.4Gbps
		5G NR NSA(Gigabit Ethernet port)		3.2Gbps
		4G LTE (Gigabit Ethernet port)		1.6Gbps
		WCDMA (Gigabit Ethernet port)		42Mbps
	Uplink	5G NR SA(Gigabit Ethernet port)		900Mbps
		5G NR NSA(Gigabit Ethernet port)		600Mbps
		4G LTE (Gigabit Ethernet port)		200Mbps
		WCDMA (Gigabit Ethernet port)		5.76Mbps
<b>Power Supply</b>	POE 24V/ 48V DC (IEEE802.3at optional)			
<b>Power Consumption</b>	< 24W			
<b>Dimensions (Maximum)</b>	288 x 288 x 82 mm   11.34 x 11.34 x 3.23 in			
<b>Weight</b>	< 2 kg   4.41 lbs			
<b>Humidity</b>	5% ~ 95% Non-condensing			
<b>Temperature</b>	Working temperature: -30 °C ~ 60 °C   -22 °F ~ 140 °F Storage temperature: -40 °C ~ 70 °C   -40 °F ~ 150 °F			

## SOFTWARE SPECIFICATIONS

<b>Data Services</b>	4 x APNs
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	Multiple PDN		
	IPv4/IPv6 dual stack support		
<b>LAN</b>	DHCPV4/ DHCPV6 server/ client		
	DNS and DNS proxy		
	DMZ		
	UPNP		
	ALG		
	IEEE 802.1Q VLAN		
	MAC address filtering		
	<b>Management</b>	Version Management	Image checksum
HTTP/FTP auto-upgrade			
TR069		Upload/ Download the ACS specified file	
		Download the configuration file	
		Configure & queries parameters	
		Remote upgrade	
		Remote debugging operations	
		Cycle monitor	
SNMP			
WebGUI/ CLI		Different level of user login priority with various limitation and display	
		Encryption backup current settings and restore the backup settings	
		Export of current diagnosis results and operation logs	
		Statistics of LAN link status, transmit and receive traffic and up time	
Diagnostics			
USIM PIN management and card authentication			
USIM activation			
<b>VPN &amp; Routing</b>	Bridge mode		
	NAT mode		
	Port mirror		
	Port forwarding		
	IPSec		
	PPTP		
	GRE tunnel		
	L2TP V2/V3		
<b>Security</b>	Firewall		

	Mac address filtering
	IP address filtering
	URL filtering
	Access control
	HTTPS login from WAN
	DDOS attack protection
	Hierarchical user management

## COMPLIANCE SPECIFICATIONS

<b>Environment Compliance</b>	Cold: IEC 60068-2-1
	Dry heat: IEC 60068-2-2
	Damp heat cyclic: IEC 60068-2-30
	Change of temperature: IEC 60068-2-14
	Shock: IEC60068-2-27
	Free fall: IEC60068-2-32
	Vibration: IEC60068-2-6

## ANTENNA SPECIFICATIONS

700 MHz ~ 1G MHz	3.5 dBi	Directional ④
1.7 GHz ~ 2.1 GHz	7 dBi	Directional ④
2.3 GHz ~ 2.7 GHz	7.5 dBi	Directional ④
3.4 GHz ~ 3.8 GHz	8 dBi	Directional ④
3.8 GHz ~ 4.2 GHz	8 dBi	Directional ④

① UL 2 × 2 MIMO is only supported in 5G SA mode.

② HPUE only supports single carrier.

③ Cellular data throughput is the theoretical value of the module.

④ The antenna specifications is based on prototype, the commercial type may have subtle adjustments.

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