

CPX80P CPE DATASHEET

CPX80P

5G Sub-6 Outdoor CPE



CAT20

5G NR/LTE/WCDMA

Qualcomm SDX62

POE

IP67

The CPX80P from SUNWAVE 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.

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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

Technical Standard	WAN	5G NR/LTE/WCDMA
	LAN	IEEE 802.3/802.3u
Cellular Bands (CPX80P – A Version)	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
Cellular Bands (CPX80P – B Version)	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/B

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		46 (LAA) /B48/B66/B71	
External Port	1 x RJ45 2.5Gigabit Ethernet port 1 x SIM Slot (2FF)		
Antenna	CPX80P-A2: 4 cellular antenna interfaces CPX80P-B2: 4 cellular antenna interfaces		
LED Indicators	1 x Power indicator 1 x Network status indicator 1 x Tri-color Signal strength indicators 1 x SIM status indicator		
Button	1 x reboot /restore button		
Carrier Aggregation	LTE: DL 5CA and UL 2CA NR: 2CA		
Tx/Rx	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)	
Maximum Transmission Power	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)
Maximum Transmit Throughput (CPX80P-A2/CPX80P-B2) ③	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
Power Supply	POE 24V/ 48V DC (IEEE802.3at optional)		
Power Consumption	< 24W		
Dimensions (Maximum)	288 x 288 x 82 mm 11.34 x 11.34 x 3.23 in		
Weight	< 2 kg 4.41 lbs		
Humidity	5% ~ 95% Non-condensing		
Temperature	Working temperature: -30 °C ~ 60 °C -22 °F ~ 140 °F Storage temperature: -40 °C ~ 70 °C -40 °F ~ 150 °F		

SOFTWARE SPECIFICATIONS

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Data Services	4 x APNs		
	Multiple PDN		
	IPv4/IPv6 dual stack support		
LAN	DHCPV4/ DHCPV6 server/ client		
	DNS and DNS proxy		
	DMZ		
	UPNP		
	ALG		
	IEEE 802.1Q VLAN		
	MAC address filtering		
Management	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			
VPN & Routing	Bridge mode		
	NAT mode		
	Port mirror		
	IPv4/IPv6 dual stack		
	Port forwarding		
	IPSec		
	PPTP		
	GRE tunnel		

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Security	L2TP V2/V3
	Firewall
	Mac address filtering
	IP address filtering
	URL filtering
	Access control
	HTTPS login from WAN
	DDOS attack protection
	Hierarchical user management

COMPLIANCE SPECIFICATIONS

Environment Compliance	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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