

CPX80P CPE DATASHEET



CPX80P

5G Sub-6 Outdoor CPE

CAT20

5GNR/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 –A2)	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 –B2)	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	
Cellular Bands (CPX80P – B2H)	5G NR	n48/n77/n78	
	LTE	B42/B43/B48	
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 CPX80P – B2H: 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)	
	CPX80P-B2H	2Tx/4Rx (n48/n77/n78) ^①	
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/CPX80 P-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		

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Temperature

Working temperature: -30 °C ~ 60 °C | -22 °F ~ 140 °F
 Storage temperature: -40 °C ~ 70 °C | -40 °F ~ 150 °F

SOFTWARE SPECIFICATIONS

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	

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Security	Port forwarding
	IPSec
	PPTP
	GRE tunnel
	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

CPX80P-A2/B2		
617 MHz ~ 960 MHz	6 dBi	Directional
1.7 GHz ~ 2.7 GHz	9 dBi	Directional
3.3 GHz ~ 5 GHz	11 dBi	Directional
CPX80P-B2H		
3.3 GHz ~ 4.2 GHz	16 dBi	Directional

- 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.

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