



CPX80I

5G Industrial Outdoor CPE

CAT20

5G NR/LTE/WCDMA

RS485/RS232

IP67

The CPX80I from BTI WIRELESS is a 5G Industrial Outdoor CPE. It supports various 4G/5G spectrums and ultra-high speed in a ruggedized form factor. This product offers industrial-grade environmental qualifications while providing high speed data services for the bandwidth-intensive applications. Up to IP67 with water-proof, shock-resistant, and lightning-proof, combined to ensure the quality of wireless communication under different outdoor environments.

KEY FEATURES

- Qualcomm SDX55 chipset solution
- 5G NR and LTE-A CAT20 dual mode
- Supports BOTH SA and NSA
- Global/CBRS bands supported
- Ruggedized and anti-vibration design
- Powerful software features, supporting all router features
- Supports Wi-Fi 6
- Web, TR069 and SNMP based device management
- Supports 2.5G WAN/LAN & 1G LAN and diverse industry interfaces
- IP67 rating for outdoor environment

SYSTEM ELEMENTS



HARDWARE SPECIFICATIONS

Module	Quectel RM500Q-GL	
Cellular Bands	5G NR	n1/n2/n3/n5/n7/n8/n12/n20/n28/n38/n40/n41/n48/n66/n71/n77/n78/n79
	LTE	LTE-FDD: B1/B2/B3/B4/B5/B7/B8/B9/B12/B13/B14/B17/B18/B19/B20/B25/B26/B28/B29/B30/B32/B66/B71 LTE-TDD: B34/B38/B39/B40/B41/B42/B43/B46(LAA)/B48
	WCDMA	B1/B2/B3/B4/B5/B6/B8/B19
GNSS	GPS/GLONASS/BeiDou/Galileo	
WLAN	MIMO 2*2 Wi-Fi 6	

Network Mode	Supports SA/NSA
External Port	1 x M12 for power supply 1 x M12 for 2.5G WAN/LAN + 1G LAN 1 x M12 for RS232 + 2 x DI + 2 x DO 1 x M12 for RS485 2 x Nano SIM slot (4FF, dual SIM single standby, *dual eSIM supported)
Antenna Port	3 x TNC connector for NR<E antenna 1 x TNC connector for NR<E&GNSS antenna 2 x TNC connector for 2.4&5GHz Wi-Fi antenna
LED Indicators	1 x power indicator 1 x network status indicator 1 x RSSI indicator
Button	1 x reboot or restore button
MIMO	DL 4*4 MIMO UL 2*2 MIMO
ENDC	Supported
Tx/Rx	2Tx/4Rx (n41/n77/n78/n79) 1Tx/4Rx (other LTE/NR bands)
Power Supply	DC 24V
Power Consumption	< 20W
Dimensions	290 x 189 x 56 mm 11.42 x 7.44 x 2.20 in
Weight	< 2.5 kg 5.5 lbs
Humidity	Operation/Storage: 5% - 95% (non-condensing)
Temperature	Operating temperature: -40 °C ~ +70 °C -40 °F ~ +158 °F Storage temperature: -40 °C ~ +85 °C -40 °F ~ +185 °F

SOFTWARE SPECIFICATIONS

Data Services	4 x APNs (2 for data, 1 for voice, 1 for management)
	Multiple PDN (up to 16 PDNs)
	IPV4/IPV6 compliance
LAN	IEEE 802.1Q VLAN
	DHCPV4/ DHCPV6 server/ client
	DNS and DNS proxy
	DMZ
	UPNP
	ALG
	Multi-cast/ Multi-cast proxy
	MAC address filtering
GPS broadcast to LAN	

Management	Version management	Image checksum
		Active version and backup version
		Rollback mechanism when upgrade fails
	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	Various level of user login priority with different limitation and display
		Encryption backup current settings and restore the backup settings
		Export 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	Route mode	
	Bridge mode/ Bypass mode	
	NAT mode	
	Port mirror	
	ARP	
	IPV4/IPV6 dual stack	
	Port forwarding	
	IPSec	
	PPTP	
	GRE tunnel	
	L2TP V2/V3	
	VPN pass-through	
Security	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	Protection rating: EN60529:IP67
	Salt mist: IEC68-2-11
	Shock: IEC60068-2-27/EN50155/EN61373
	Free Fall: IEC60068-2-32 (1 meter height with package)
	Vibration: IEC60068-2-6/EN50155/EN61373

Contact Us

www.btiwireless.comsales@btiwireless.com