



KB-GT10 5G CPE

Product Description

V11

Date 2022-03-16

1. Product Overview



Summary

5G & WiFi-6 Smart Router System (CPE), is based on brand-new embed platform, it can be satisfied with growing-up mobile **connections** requirements and provides the fast speed beyond your imagination.

The CPE is compatible with NSA/SA dual-mode, suits to all network types all over the world, it means you just plug and play it and enjoy the ultra-fast broadband connection at any places.

The CPE brings the new way to enable you experience VR/AR/4K/8K streaming freely and easily. With 802.11ax (Wi-Fi 6) technology built-in, the single CPE has wider wireless coverage and more bandwidth. Meanwhile the CPE brings higher security, better network efficiency and longer battery life.

Key Features

■ 5G Cellular

Built-in Qualcomm™ SDX62 modem, it has best 5G mobile network performance and works with integrated world-wide 5G to 2G multi-mode.

■ Wi-Fi 6 (802.11ax)

The revolutionary Wi-Fi technology with OFDMA and DL MU-MIMO, faster wireless line, more client connection, lower latency, best network efficiency.

■ Higher Wireless Capacity

Dual-band 4 spatial streams, the CPE outputs 3100Mbps wireless bandwidth (600 + 2475), makes you peace of mine while enjoy UHD videos, online games at the home rush hours. It's the future-proof investment absolutely.

■ Hybrid MESH+ Networking

The CPE inherits the mesh technology and supports “wired / wireless” hybrid networking. It’s so convenient to cover all corners and dead-zones by adding one more MESH+ node (another series of router). it improves the deployments of wireless network and optimized the seamless feature.

5G Datasheet

■ 5G Cellular

- 1) 5G Baseband: Qualcomm® Snapdragon™ X62 Modem-RF System
- 2) 5G Network Modes: SA (standalone), NSA (non-standalone)
- 3) 5G NSA Bands: n1/n2/n3/n5/n7/n8/n12/n20/n25/n28/n38/n40/n41/n48*/n66/n71/n77/n78/n79
- 4) 5G SA Bands: n1/n2/n3/n5/n7/n8/n12/n20/n25/n28/n38/n40/n41/n48*/n66/n71/n77/n78/n79
- 5) 5G Standards:3GPP Release 15
- 6) 5G SA Transmission Speed:2.4Gbps/900Mbps (up to ISPs)
- 7) 5G NSA Transmission Speed:3.4Gbps/550Mbps (up to ISPs)

4G Datasheet

■ 4G Cellular

- 8) LTE Category : Down Cat 19/ UP Cat 18
- 9) LTE-FDD:B1/B2/B3/B4/B5/B7/B8/B12/B13/B14/B17/B18/B19/B20/B25/B26/B28/B29/B30/B32/B66/B71
- 10) LTE-TDD: B34/B38/B39/B40/B41/B42/B43/B48
- 11) LTE Down 4 × 4 MIMO:B1/B2/B3/B4/B7/B25/B30/B32/B34/B38/B39/B40/B41/B42/B43/B48/B66
- 12) WCDMA:B1/B2/B3/B4/B5/B8/B19
- 13) LTE Speed: Down 1.6 Gbps ; UP 200 Mbps

WiFi6 Datasheet

■ WiFi 6 (802.11ax)

- 1) Working Radio: #1: 600Mbps @ 2.4GHz; #2: 1200Mbps @ 5.1-5.8GHz
- 2) Coding Technology:1024-QAM / OFDMA
- 3) Peak Connections:>100+ Clients
- 4) Wi-Fi Standard Conformance:WiFi6 and 802.11ac / 802.11n backward
- 5) Antenna: 8 pcs high performance antennas with 12 pcs external FEM components.

■ Data Switching

- 1) Mobile 4G/5G Connection (Support APN)
- 2) Giga Ethernet Connection
- 3) MESH:MESH+ hybrid
- 4) 2.4G/5.8Ghz WiFi
- 5) Advanced Firewall
- 6) MAC Filter
- 7) WiFi Security
- 8) VPN Passthrough and VPN Client (L2TP, PPTP)
- 9) IPV4/IPV6
- 10) WEB / APP Mangement
- 11) Firmware upgrade

Hardware specifications

■ Hardware Specification

- 1) CPU: MT7981AT+SDX62
- 2) Memory:16MB Flash + 256MB DDR3
- 3) Ethernet:1*1Gbps WAN,2*LAN 1Gbps
- 4) 1* SIM Slot (Nano-SIM)
- 5) Reset button
- 6) MESH+ Button
- 7) MESH+ LED Switch
- 8) LED Indicator
 - MESH+ Working Status (breathing light)
 - 4G Status
 - 5G Status
 - WiFi Status
 - Power Status
- 9) General
 - Power Consumption:<20W
 - DC Power Supply: 12V/2A
 - Working temperature:0°C ~ 40°C,
 - Storage temperature: -20°C ~ +70°C
 - Humidity:5% ~ 95%
 - Dimensions:210X160X40MM
 - Weight: 1.4KG

2. Technical Specifications

Model	KB-GT10
CPU	MT7981AT+SDX62
Flash	16MB
RAM	2Gb
WiFi Frequency	2.4G&5G
WiFi Standard	2.4G:802.11b/g/n /ax 2T2R MIMO, 5.8GHz : 802.11a/n/ac/ax 2T2R MIMO
WiFi	2.4GHz :600Mbps ,5GHz :1200Mbps
5G Standard	3GPP Release 15 NSA/SA operation, Sub-6 GHz
5G Network Mode	NSA/SA
5G/4G Data Rate	5G SA Transmission Speed:2.1Gbps/900Mbps (up to ISPs) 5G NSA Transmission Speed:2.5Gbps/650Mbps (up to ISPs) LTE : Down 1.0 Gbps ; UP 200 Mbps

5G Frequency Bands	<p>5G NR NSA n1/n2/n3/n5/n7/n8/n12/n20/n25/n28/n38/n40/n41/n48*/n66/n71/n77/n78/n79</p> <p>5G NR SA n1/n2/n3/n5/n7/n8/n12/n20/n25/n28/n38/n40/n41/n48*/n66/n71/n77/n78/n79</p> <p>MIMO Downlink: 4 × 4 MIMO on n1/n2/n3/n7/n25/n38/n40/n41/n48/n66/n77/n78/n79 Uplink: 2 × 2 MIMO on n41</p>
--------------------	---

4G&3G Frequency Bands	<p>LTE Category Downlink Cat 19/ Uplink Cat 18</p> <p>LTE-FDD B1/B2/B3/B4/B5/B7/B8/B12/B13/B14/B17/B18/B19/B20/B25/B26/B28/B29/B30/B32/B66/B71</p> <p>LTE-TDD B34/B38/B39/B40/B41/B42/B43/B48</p> <p>LAA B46 (Support 2 × 2 MIMO) Downlink 4 × 4 MIMO B1/B2/B3/B4/B7/B25/B30/B32/B34/B38/39/B40/B41/B42/B43/B48/B66</p> <p>WCDMA B1/B2/B3/B4/B5/B6/B8/B19</p>
-----------------------	---

Modulation Mode	<p>5G: GMSK/8PSK/BPSK/QPSK/16QAM/64QAM/256Q</p> <p>AM WIFI: 1024-QAM / OFDMA</p>
-----------------	--

WiFi Output Power	2.4 G	Formats and channels		Ant 0 (DB)		Ant 1 (DB)	
		80 . 211 B		20		20	
		80 . 211 G		19		19	
		80 . 211 N 20		19		19	
		80 . 211 N 40		18		18	
		80 . 211 AX 20		18		18	
		80 . 211 AX 40		18		18	
	5.8 G	Formats and channels		Ant 0 (D B)	Ant 1 (D B)	Ant 2 (D B)	Ant 3 (D B)
		11 a 54 M		20	20		
		11 n 20 MCS 0		20	20		
		11 n 20 MCS 7		20	20		
		11 n 40 MCS 0		20	20		
		11 n 40 MCS 7		19	19		
		11 ac 20 MCS 0		20	20		
		11 ac 20 MCS 8		19	19		
		11 ac 40 MCS 0		19	19		
		11 ac 40 MCS 9		18	18		
		11 ac 80 MCS 0		19	19		
		11 ac 80 MCS 9		18	18		
		11 ax 20 MCS 0		19	19		
11 ax 20 MCS 11		17.5	17.5				
11 ax 40 MCS 0		19	19				

		11 ax 40 MCS 11	18	18		
		11 ax 80 MCS 0	19	19		
		11 ax 80 MCS 11	17	17		
WiFi Receive Sensitivity	<p>2.4G: 11X HE20: -70dBm@MCS11, -80dBm@MCS0. 11X HE40: -70dBm@MCS11, -80dBm@MCS0. 11n HT20: -70dBm@MCS7, -80dBm@MCS0. 11n HT40: -70dBm@MCS7, -78dBm@MCS0. 11g: -68dBm@54Mbps, -82dBm@6Mbps. 11b: -70dBm@11Mbps, -85dBm@1Mbps.</p> <p>5.8G: 11a: -72dBm@54Mbps, -85dBm@6Mbps. 11n HT20: -75dBm@MCS7, -85dBm@MCS0. 11n HT40: -75dBm@MCS7, -88dBm@MCS0. 11ac HT80: -65dBm@MCS9 11aX HT80: -65dBm@MCS11</p>					
EVM	<p>802.11n@MCS7: ≤ -30dB 802.11g@54M: ≤ -30dB 802.11b@11M: ≤ -15dB 802.11a@54M: ≤ -28dB 802.11ac@MCS9: ≤ -33dB 802.11aX@MCS11: ≤ -33dB</p>					
Frequency Deviation	±20ppm					
Interface	<p>2*10/100M/1000 LAN 1*10/100M/1000 WAN 1*12V 2A DC Power Input 1 Reset Button 1 Breathing Light Button 1 SIM card slot 1 MESH Networking Button</p>					
Network Extension	MESH					
Reset	Reset (Long press 10 seconds to restore the factory settings)					
MESH	Networking: short press (blue networking light flashes)					
LED Indicator	Power, Breathing Light, 4G Signal, 5G Signal, WiFi Signal					
Power Consumption	< 24W					
Environment	<p>Operating Temperature : -20C° ~ +50C° Storage Temperature:-40C° ~ +70C° Humidity : 5% ~ 95% (Non condensation)</p>					
Dimension	210*160*40MM					
Weight	1.4KG (Includes color box accessories)					

Software Function

IPV4	Support
IPV6	Support
Smart QOS	Support
Parent Control	Support
UPNP	Support
VPN	Supports L2TP VPN client Supports PPTP VPN client
APN	Support
DDNS	Support
DMZ	Support
Port Mapping	Support
MESH	Support private MESH
APP	Support
TR069	Support
WiFi Encryption	Open WEP WPA2-PSK WPA3-SAE WPA/WPA2-PSK WPA2-PSK/WPA3-SAE
WiFi Band Aggregation	Support
Other	5G connection information display Manual frequency lock Traffic Statistics

What' s in the package?

- One (1) 5G CPE Router
- One (1) 1m Cat6 Ethernet cable
- One (1) Power Adapter
- Quick Start Guide