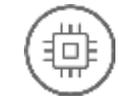# XMC6251

5G Indoor CPE

Highlights:

V620
5G modem

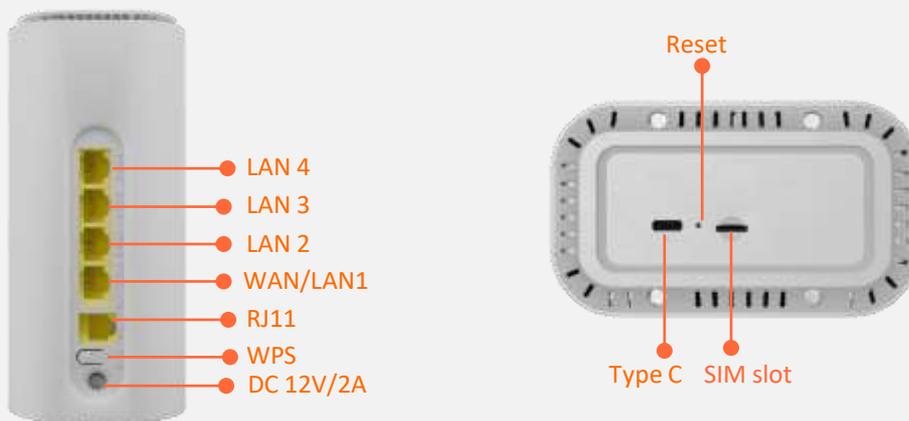SA & NSA
3G/4G/5G

VoNR/VoLTE

IPv6 Stack

Firewall

Introduction:

The XMC6251 CPE integrates the Ivy620 chip, supporting 3G/4G/5G networks (SA/NSA). With 4 Internal mobile antennas and 4 WiFi antennas (WiFi 6 compatible), it offers fast and reliable connectivity. The device includes 4 Gigabit Ethernet ports and a voice port for VoLTE or VoNR. Its foldable antennas offer convenience for storage and portability. The XMC6251 ensures optimized internet access anywhere, anytime.

Interface of XMC6251:

LAN 4
LAN 3
LAN 2
WAN/LAN1
RJ11
WPS
DC 12V/2A

Reset

Type C   SIM slot

Technical Specifications

⊙ Product Feature

Dimension	155*110.9*65.3mm
Net Weight	about 250g
Working Temp	-20°C to 65°C
Storing Temp	-40°C to 70°C
Humidity	5% to 90%
AC adapter	12V/2A
Buttons	Reset/WPS, Restore Factory Settings or active WPS

⊙ 5G/4G/3G WAN Feature

Chipset	V620
3GPP release	Release 16
Frequency Bands	5G NR NSA: n1/n3/n5/n7/n8/n20/n28/n38/n40/n41/n71/n75/n76/n77/n78/n79 5G NR SA: n1/n3/n5/n7/n8/n20/n28/n38/n40/n41/n71/n75/n76/n77/n78/n79 FDD LTE:B1/B3/B5/B7/B8/B20/B28/B32/B71 TDD LTE: B38/B40/B41/B42/B43 WCDMA:B1/B5/B8
Bandwidth	5G NR:5/10/15/20/25/30/40/50/60/80/90/100 MHz LTE Band:1.4/3/5/10/15/20 MHz
Modulation	5G NR: UL and DL: 256QAM LTE: UL: QPSK, 16QAM, 64QAM,256QAM；DL: QPSK, 16QAM, 64QAM, 256QAM WCDMA:UL: BQSK,QPSK, 16QAM；DL: QPSK, 16QAM, 64QAM
5G Antenna	4 Internal Antennas
RF Power Level	• Power Class 3 (23 dBm ±2.7 dB) for 5G NR n1/n3/n5/n7/n8/n20/n28/n38/n71/n75/n76 • Power Class 2 (26 dBm +2/-3 dB) for 5G NR n40/n41/n77/n78/n79 for HPUE • Power Class 1.5 (29 dBm +2/-3 dB) for 5G NR n41/n77/n78/n79 For HPUE • Power Class 3 (23 dBm ±2 .7dB) for LTE B1/B3/B5/B7/B8/B20/B28/B32/B38/B40/B42/B43/B71 • Power Class 2 (26 dBm +2/-3 dB) for LTE B41 For HUPE • Power Class 3 (23 dBm ±2 dB) for UMTS B1/B5/B8
Data Rate	5G: NSA: 5.47Gbps (DL)/1.35Gbps (UL) SA: 4.67 Gbps (DL)/1.25Gbps (UL) LTE: Cat 19 (DL)/Cat 18 (UL); 1.6Gbps (DL)/200 Mbps (UL) WCDMA: 3GPP-R9 DC-HSDPA: 42.2 Mbps (DL)/HSUPA: 11 Mbps (UL); WCDMA: 384 kbps (DL)/384 kbps (UL)

⊙ WLAN Feature 2.4G WIFI

Chipset	FD7652S
Frequency	2.4GHz(2400 - 2483.5 MHz)
Protocol	802.11b/g/n/ax, 40MHz; WIFI 6
Channel	ch1~ch13
Antenna	Internal, 2 x 2 MIMO
Data Rate	802.11b:Up to 11 Mbps 802.11g:Up to 54 Mbps 802.11n:Up to 300 Mbps 802.11ax:Up to 572.4 Mbps
Transmit Power	18±2dBm @ 802.11b 18±2dBm @ 802.11g 16±2dBm @ 802.11n 12±2dBm @ 802.11ax
Receiver input level sensitivity	<-87dBm at the antenna port,11Mbps @ 802.11b <-75dBm at the antenna port,54Mbps@ 802.11g <-72dBm at the antenna port,150Mbps @ 802.11n(HT40) <-70dBm at the antenna port,300Mbps @ 802.11ac(HT40) <-58dBm at the antenna port,572.4Mbps @ 802.11ax(HT40)

⊙ WLAN Feature 5.8G WIFI

Chipset	FD7652P
Frequency	5.15~5.25GHz; 5.25~5.35GHz; 5.47~5.73GHz; 5.735~5.835GHz
Protocol	802.11a/n/ac/ax, 80MHz; WIFI 6
Channel	Ch36,Ch40, Ch44, Ch48; Ch52~Ch64; Ch100~Ch140; Ch149~Ch165
Antenna	Internal, 2 x 2 MIMO
Data Rate	802.11a:Up to 54 Mbps 802.11n:Up to 300 Mbps 802.11ac:Up to 866.6 Mbps 802.11ax:Up to 1200Mbps
Transmit Power	17±2dBm @ 802.11a 17±2dBm @ 802.11n 14±2dBm @ 802.11ac 12±2dBm @ 802.11ax
Receiver input level sensitivity	<-74dBm at the antenna port,54Mbps @ 802.11a <-69dBm at the antenna port,300Mbps @ 802.11n(HT40) <-59dBm at the antenna port,866.6Mbps @ 802.11ac(VHT80) <-53dBm at the antenna port,1200Mbps @ 802.11ax(HE80)

Function Data

LAN/WAN	4GE*RJ45 can support WAN/LAN Self-Adapter
SIM slot	Support SIM (4FF nano)
USB	Type C , for FW debug or ECM modem (USB RNDIS)
Power Jack	12V/2A interface recommended
RJ11	VoNR/VoLTE Voice
Indicator light	Power indicator (LED, White) 3G/4G /5G Network Status Indicator(LED,White) WiFi indicator (LED, White),
Language	Chinese/English/Español/Português, Customized
System	Connection Status; Statistics；Device Management; Power Mangement
Mobile Service	SMS Manager; Automatic APN matching according to USIM; Auto Data Connection; PIN/PUK Management; Network Mode Selection (3G/LTE/Auto)
Router	SSID; OPEN, WPA2(AES)-PSK/, WPA-PSK/WPA2-PSK encryptions; APN management; IPv4/IPv6; VPN Pass through contains IPSecVPN，PPTP VPN，L2TP VPN; DHCP Server, Dynamic IP, Static IP; UPnP, DMZ; Firewall:Port Forwarding; DDNS, NAT; Access Control, Local Management
Management	TR069/FOTA
OS	Windows 7/8/XP/10 MAC OS 10.10+ Android 10/11 Ubuntu 15.04+ Browser: IE9+, Firefox, Google Chrome, Safari, Opera
FW Upgrade	USB/FOTA