PUSR®
www.pusr.com

Communication Expert
of Industrial IOT

AP/NR530X Specification

5G NR Router/Outdoor AP



Introduction

AP/NR530X is an outdoor AX7800 Wi-Fi6 tri-band AP, NR530X available in 5G NR+Wi-Fi6. The product is based on a powerful Qualcomm wireless core, with a 27dBm high power and external antennas to achieve a larger coverage range. It supports IEEE 802.11a/b/g/n/ac/ax protocols, with a maximum WiFi access rate of 7800Mbps. It comes with standard 512MB of RAM (customizable from 256MB to 1GB).

NR530X is equipped with a dedicated IoT/eMBB application-designed M.2 module for global 5G Sub-6GHz networks. It adopts 3GPP Release 16 technology and automatically adapts to 5G NR NSA and SA network deployments, while also being backward compatible with 4G/3G. It enables wired broadband and cellular broadband networks to be used as backups for each other. It can provide network connectivity to WiFi users in scenarios where wired broadband access is lacking, through 5G broadband.

The outstanding performance and stability of the product are not only derived from the high-end Qualcomm core platform, but also rely on our professional R&D team’ s software and hardware design. The product can be widely used in industries and scenarios such as park coverage, energy mines, smart docks, warehousing and logistics, smart cities, exhibition venues, etc.

LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

Product Features

- AX7800 Wi-Fi 6, M.2 5G SA/NSA Sub 6GHz Router(NR530X).
- 5G NR Router employs 3GPP Rel. 16 technology, it supports both 5G NSA and SA modes, covers all the main stream carriers worldwide.
- Supports the Wi-Fi 6(802.11ax) standard,2.4GHz and 5GHz dual-frequency UL/DL MU-MIMO, enabling AP to send data to multiple terminals at the same time.
- Fat and Fit AP in one, Fit AP mode managed uniformly by the wireless controller (AC) , Fat AP mode independent web page management.
- 2.5G Ethernet port. Using 2.5Gbps Ethernet port, compared with Gigabit port, the speed is greatly improved.
- Set WAN/LAN port as WAN to enable NR530X use the landline internet from WAN, and 4G/5G connection works as a backup to provide a sustained and reliable internet connection for you.
- Automated failover/failback back up among Ethernet, Cellular and Wi-Fi.
- Multiple SSID.

Dimensions

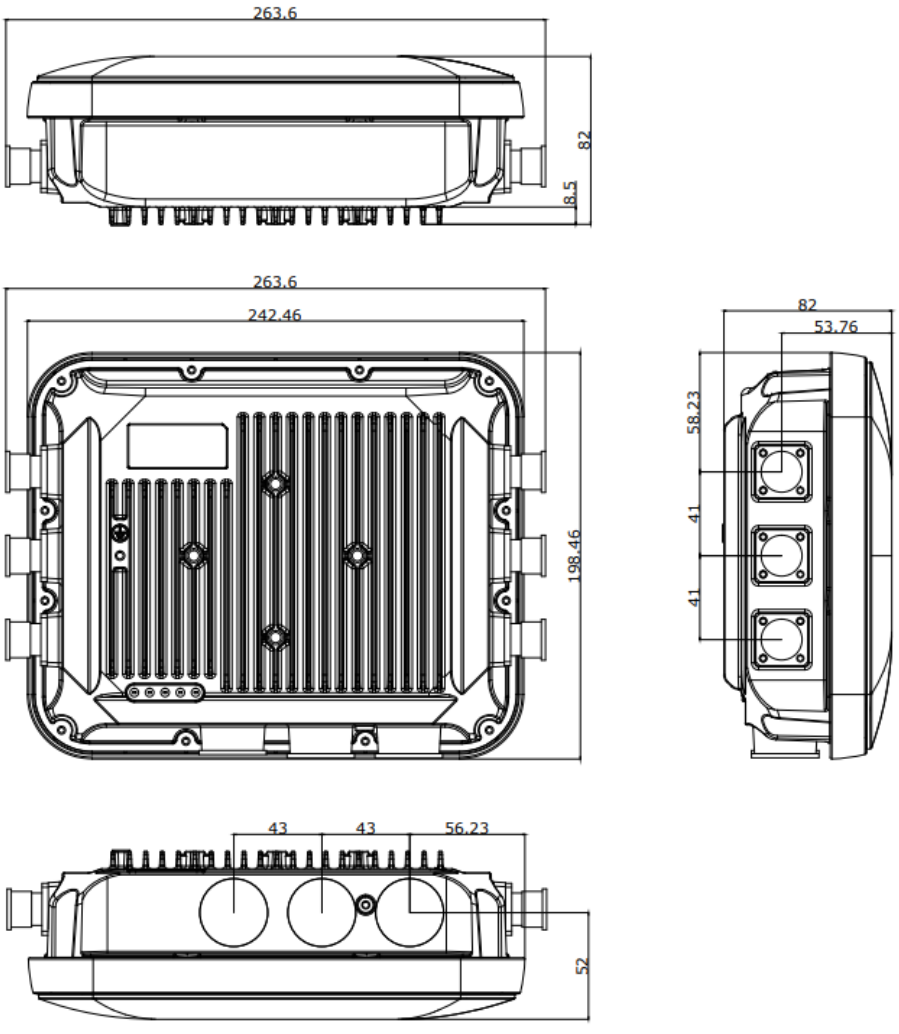


Fig.1 Dimension of AP/NR530X

Specification

Mobile(Optional)	
5G NR Module	Qualcomm Snapdragon X62
Frequency Bands	5G NR SA: n1/n2/n3/n5/n7/n8/n12/n13/n14/n18/n20/n25/n26/n28/n29/n30/n38/n40/n41/n48/n66/n70/n71/n75/n76/n77/n78/n79
	5G NR NSA: n1/n2/n3/n5/n7/n8/n12/n13/n14/n18/n20/n25/n26/n28/n29/n30/n38/n40/n41/n48/n66/n70/n71/n75/n76/n77/n78/n79
	LTE FDD: B1/B2/B3/B4/B5/B7/B8/B12/B13/B14/B17/B18/B19/B20/B25/B26/B28/B29/ B30/B32/B66/B71
	LTE TDD: B34/B38/B39/B40/B41/B42/B43//B48
	LAA:B46
	WCDMA:B1/B2/B4/B5/B8/B19
Data Transmission Rates	5G SA Sub-6: Max. 2.4 Gbps (DL)/Max. 900 Mbps (UL)
	5G NSA Sub-6: Max. 3.4 Gbps (DL)/Max. 550 Mbps (UL)
	5G NSA mmWave: Max. 4.0 Gbps (DL)/Max. 1.4 Gbps (UL)
	LTE-FDD: Max. 1.6 Gbps (DL)/Max. 200 Mbps (UL)
	HSPA+ : Max. 42Mbps (DL)/Max. 5.76Mbps (UL)
Antennas	Internal 4 high gain antennas
SIM Card	1 x Mini SIM(2FF), Push-push type
Wi-Fi Interface	
Wi-Fi Chipsets	2.4GHz: Qualcomm IPQ5018 (Dual-core ARM Cortex-A53@1GHz)
	5GHz: Qualcomm QCN6102+QCN6024
Memory	Flash:SPI NAND 128MB + SPI NOR 32MB
	RAM:512MB DDR3L SDRAM
Wi-Fi Standards	2.4 GHz: IEEE802.11b/g/n/ax
	5.8 GHz: IEEE 802.11a/n/ac/ax
Frequency	2.4 GHz(2.412GHz - 2.484GHz)
	5 GHz(5.15GHz ~5.85GHz)
Antennas	2.4GHz: 2 × N-K type connectors
	5GHz: 4 × N-K type connectors
Wi-Fi Security	Open, WPA, WPA2PSK_TKIPAES,WAP2_EAP, WPA3
Operating Modes	Wireless router mode Access point mode Repeater mode

End Users	256
Wi-Fi Data Rates	802.11a : up to 54 Mbps 802.11b : up to 11 Mbps 802.11g : up to 54 Mbps WiFi 4 (802.11n) : up to 300 Mbps WiFi 5 (802.11ac) (1024QAM) : up to 1733 Mbps WiFi 6 (802.11ax) (2.4GHz) : up to 574 Mbps WiFi 6 (802.11ax) (5GHz-1) : up to 2402 Mbps WiFi 6 (802.11ax) (5GHz-2) : up to 4804Mbps
TX Power	27dBm
Ethernet Interface	
WAN/LAN Port	1 x Gigabit WAN (can be configured as LAN) RJ45, 10/100/1000 Mbps, auto MDI/MDIX
Mode	Full or Half Duplex (Auto-Sensing)
Power Supply	
Power Input	48V PoE input over WAN
Power Consumption	≤18W
Standard	IEEE 802.3at standard
Physical Characteristics	
Housing	Metal
Dimension	263.6*198.46*82mm(L*W*H)
Installation	Wall or Bracket mounting
Operating Temperature	-40°C ~ +70°C
Storage Temperature	-40°C ~ +85°C
Ingress Protection	IP67
Weight	1800g
Software	
VPN Client	IPSec Client PPTP VPN Client L2TP VPN Client
Others	
Button	Press and hold 5s to restore factory Settings
Console	RJ45
Indicators LED	PWR,ETH, 5G , 2.4G, 5.8G.

Order Guide

Wireless AP Order guide			
Model / Item	AP530X (Wi-Fi6) NR530X (5G+Wi-Fi6)	AP520X (Wi-Fi6) NR520X (5G+Wi-Fi6)	AP310i (Wi-Fi6) NR310i (5G+Wi-Fi6)
Product Views			
Description	WiFi 6/ 6E ax7800 Tri-band outdoor AP	WiFi 6 ax3000 dual-band outdoor AP	WiFi 6 ax3000 dual-band ceiling AP
Wi-Fi Generation	WiFi 6/WiFi 6E(Optional)	WiFi 6	WiFi 6
Wi-Fi Frequency	2.4G+5G1+5G2(or 6G)	2.4G+5G	2.4G+5G
Spatial Streams	2*2+2*2+4*4 MU-MIMO	2*2+2*2 MU-MIMO	2*2+2*2 MU-MIMO
Wi-Fi speed	573.5+2401+4802Mbps	573.5+2401Mbps	573.5+2401Mbps
Wi-Fi antenna	External	External	Internal
Ethernet	1*2.5G WAN/LAN(PoE in)	1*1G WAN/LAN(PoE in)	1*2.5G WAN/LAN(PoE in)
Operating Temperature	-40℃ ~70℃	-40℃ ~70℃	-10℃ ~50℃
Humidity	5%~95%(non-condensing)	5%~95%(non-condensing)	5%~95%(non-condensing)
Dimension（mm）	245*200*90	245*200*90	195*195*42
Installation	Bracket	Bracket	Ceiling

Purchase & Support

■ For more information, please visit our websites:

- Official website: **https://pusr.com**
- Official shop: **https://shop.usriot.com**
- Technical support: **http://h.usriot.com/**

Your Trustworthy Smart IOT Partner

PUSR®
www.pusr.com

Official Website: www.pusr.com

Official Shop: shop.usriot.com

Technical Support: h.usriot.com

Inquiry Email: inquiry@usriot.com

Skype & WhatsApp: +86 13405313834

Click to view more: Product Catalog & Facebook & Youtube

LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000