

Miniature High Performance 5G Cellular Ethernet Gateway Concurrent Dual Band WiFi 6

Nano5G-SWP is a compact, high-performance, industrial-grade multi-network router designed for both fixed and mobile deployments. Engineered for rugged environments, this 5G router/gateway is powered by a Qualcomm Snapdragon chipset and delivers blazing-fast speeds of up to 3.4 Gbps download¹ and 900 Mbps upload¹, making it ideal for bandwidth-intensive applications. The Nano5G-SWP features Gigabit Ethernet, Dual SIM (External Nano SIM + eSIM), Concurrent Dual Band WiFi 6, GPS and 2x Programmable I/O. Its miniature footprint enables installation in tight spaces, making it a perfect fit for surveillance, covert operations, and other space-constrained scenarios.

5G

Miniature
44 x 80 x 24 mm
1.75 x 3.15 x 0.95"



5G Cellular + LTE CAT19

Gigabit Ethernet

Concurrent Dual WiFi 802.11AX

2.4 + 5 GHz 802.11AX WIFI

Dual SIM (Nano SIM + eSIM)

Features

- **Ultra Fast 5G Operation with 4G/LTE CAT19 Fallback**
- **Up to 3.4 Gbps Download / 950 Mbps Upload ¹**
- **Dual Band 802.11AX (Concurrent 2.4 & 5 GHz) WiFi**
- **Firewall with ACL Security, DMZ & Port Forwarding**
- **2x Programmable I/O**
- **IPSec, GRE / VPN Tunneling**
- **Gigabit Ethernet**
- **IPv6 & IPv4 Support**
- **Wide Operating Temperature (-40°C to +85°C)**
- **Data Usage Alerts (Email, SMS)**
- **User interface via SSH or HTTP/HTTPS web browser**
- **Microhard NMS & Microhard IoT Portal Support**



Nano5G-SWP Specifications



Cellular Data Rate (Max.)¹

5G SA Sub-6	DL 2.4 Gbps; UL 900 Mbps
5G NSA Sub-6	DL 3.4 Gbps; UL 550 Mbps
LTE	DL 1.6 Gbps; UL 200 Mbps
WCDMA	DL 42 Mbps; UL 5.76 Mbps

Cellular Frequency Bands

5G NR	NSA	n1/ 2/ 3/ 5/ 7/ 8/ 12/ 13/ 14/ 18/ 20/ 25/ 26/ 28/ 29/ 30/ 38/ 40/ 41/ 48/ 66/ 70/ 71/ 75/ 76/ 77/ 78/ 79
	SA	n1/ 2/ 3/ 5/ 7/ 8/ 12/ 13/ 14/ 18/ 20/ 25/ 26/ 28/ 29/ 30/ 38/ 40/ 41/ 48/ 66/ 70/ 71/ 75/ 76/ 77/ 78/ 79
LTE	FDD	B1/ 2/ 3/ 4/ 5/ 7/ 8/ 12/ 13/ 14/ 17/ 18/ 19/ 20/ 25/ 26/ 28/ 29/ 30/ 32/ 66/ 71
	TDD	B34/ 38/ 39/ 40/ 41/ 42/ 43/ 48
	LAA	B46
UMTS	WCDMA	B1/ 2/ 4/ 5/ 8/ 19

Wi-Fi Features

Modes	Access Point, Client, 802.11b/g/n/ax (2.4 GHz), 802.n/ac/ax (5 GHz)
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	Rate	Mode	Tx(dBm)*	Rx(dBm)
Performance (2X2 MIMO)	6 Mbps	a	26	-94 ± 2
	54 Mbps	a	26	-80 ± 2
	1 Mbps	b	26	-95 ± 2
	11 Mbps	b	26	-90 ± 2
	6 Mbps	g	26	-94 ± 2
	54 Mbps	g	26	-80 ± 2
	MCS0	n (HT20)	26	-94 ± 2
	MCS7	n (HT20)	26	-76 ± 2
	MCS0	n (HT40)	26	-92 ± 2
	MCS7	n (HT40)	26	-73 ± 2
	MCS0	ac (VHT20)	26	-93 ± 2
	MCS8	ac (VHT20)	26	-71 ± 2
	MCS0	ac (VHT80)	26	-88 ± 2
	MCS9	ac (VHT80)	26	-66 ± 2
	MCS0	ax (HE20)	26	-92 ± 2
	MCS8	ax (HE20)	26	-70 ± 2
	MCS0	ax (HE80)	26	-87 ± 2
	MCS9	ax (HE80)	26	-65 ± 2

*Total Tx power in dBm for 2 chains

Ethernet Port

LAN	1x RJ45 Ethernet Ports (10/100/1000 Gbps)
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I/O

2x Programmable I/O

GPS (Built-In Standalone)

Reporting	TCP/UDP/Email, GpsGate, TAIP
GNSS	GPS/ GLONASS/ BDS/ Galileo/ QZSS
Network	
Carrier Connection	ICMP Keep Alive, Traffic Watchdog, DDNS, Failover
Network Protocols	IPv4, IPv6, TCP, UDP, TCP/IP, ARP, ICMP, DHCP, HTTP, SNMP, FTP, DNS, Modbus Slave (TCP)
Security	VPN, IPSec with IKE/ISAKMP; Multiple tunnel support (16); 3DES and up to 256-bit AES Encryption, VPN Tunneling L2TP, GRE, Open VPN, HTTPS, RADIUS
Management	Telnet, WebUI, SNMP V1/2/3, Wireless Upgrade (HTTP/FTP), AT Command Interface (SSH/Telnet), Microhard NMS2 Support, Microhard IoT Portal Support, Data Usage Alerts, SSH
Diagnostics	RSSI, RSRP, RSRQ, SINR, Voltage, Temperature, Remote diagnostics, UDP Event Reporting, SMS Alerts, Netflow

Host Interfaces

Antenna	WIFI: 2x MMCX Cellular: 4x MMCX
Data	Ethernet: RJ45
SIM	Nano (4FF) + eSIM
Power, I/O	4 PIN Interlock

Input Voltage

	8-30V _{dc} Reverse Polarity Protection PoE+ (802.3at)
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Environmental

Operating Temperature	-40°C to +85°C
Humidity	5-95%, non-condensing

Dimensions

Size	~ 44 x 80 x 24 mm / 1.75" x 3.15" x 0.95"
Weight	~ 145 grams

Approvals

	FCC/IC PTCRB (Pending) RoHS Compliant
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Order Options

Model	nano5G-SWP
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1. Chipset rated speeds



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