

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**



USB Drive shown for scale.

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 - Concurrent 2.4 & 5 GHz
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WiFi Performance 2.4 GHz				
Mode	HT Mode	Max. Rate	Max. Power (Adjustable)	Max. Sensitivity
802.11b	N/A	11Mbps	5 - 22 dBm	-99 ± 2 dBm
802.11g	N/A	54Mbps	5 - 22 dBm	-95 ± 2 dBm
802.11n	HT20/40	MCS7	5 - 22 dBm	-90 ± 2 dBm
802.11ax	HE20/40/80	MCS11	5 - 22 dBm	-61 ± 2 dBm
WiFi Performance 5 GHz				
Mode	HT Mode	Max. Rate	Max. Power (Adjustable)	Max. Sensitivity
802.11n	HT20/40	MCS7	5 - 24 dBm	-90 ± 2 dBm
802.11ac	VHT20/40/80	MCS9	5 - 24 dBm	-90 ± 2 dBm
802.11ax	HE20/40/80	MCS11	5 - 24 dBm	-61 ± 2 dBm

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)

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

Order Options

Model	nano5G-SWP
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1. Chipset rated speeds



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