

NetLink Fortress®

Industrial Weatherproof 5G Router

Braving the Elements with Superior Technology



Reliable connectivity for access control with oil wells, security cameras, environmental monitoring, agriculture sensors, telecommunications, smart infrastructure, energy grid monitoring, water management and more.



NetScan

The NetLink Fortress® Router provides a revolutionary dynamic allocation of connectivity. At power-on, the router will automatically detect the carrier with the strongest available cellular network and seamlessly connect.



Tested for Endurance

Our router's housing has passed rigorous percolation and salt spray tests, ensuring longevity and reliability. Crafted from lightweight anti-corrosion aluminum, our outdoor enclosure is diecast by a 100-ton pressure, providing robust protection. NetLink Fortress® is engineered for the toughest environments, ensuring reliable connectivity even in challenging conditions.



Industrial Strength

NetLink Fortress® is engineered for the toughest environments, ensuring reliable connectivity even in challenging conditions.



Weatherproof Enclosure Box

Crafted from lightweight anti-corrosion aluminum, our outdoor enclosure is diecast by a 100-ton pressure, providing robust protection. Rubber gaskets and seals create a fortress against water intrusion at every juncture. The resilient white coating defends against extreme weather conditions.



Remote Management Platform

Enjoy total device management from our NetLink Command cloud platform. Easily activate, suspend, manage data plans, location, and remote support as if you're locally connected to the device, without having to be onsite. Manage diagnostics, data filtering, VPN and more.

Stay Connected, Rain or Shine: Elevate Your Connectivity with the NetLink Fortress®
- Where Innovation Meets Endurance.



WiFi Datasheet

Shell characteristics

All-metal aluminum alloy is integrally formed, explosion-proof, waterproof, and corrosion-proof. The waterproof level supports IP66 waterproof level

5 external N-type industrial-grade WiFi antenna interfaces, adapt to different antenna types according to the needs of the scene, 8DBi high gain fiberglass antenna

The power, internet, 4G/5G instructions are clear at a glance.

External waterproof grade Gigabit Ethernet LAN port.

5G Cellular

5G Baseband: Qualcomm® Snapdragon™ X55 Modem-RF System

5G Network Modes: SA (standalone), NSA (non-standalone)

5G NSA Bands: n1/n2/n3/n5/n7/n8/n12/n20/n25/n28/n38/n40/n41/n48*/n66/n71/n77/n78/n79

5G SA Bands: n1/n2/n3/n5/n7/n8/n12/n20/n25/n28/n38/n40/n41/n48*/n66/n71/n77/n78/n79

5G Standards:3GPP Release 15

5G SA Transmission Speed:2.1Gbps/900Mbps (up to ISPs)

5G NSA Transmission Speed:2.5Gbps/650Mbps (up to ISPs)
* under development / in progress.

4G Cellular

LTE Category:Down Cat 16/ UP Cat 18
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
LTE Down 4 × 4 MIMO:B1/B2/B3/B4/B7/B25/B30/B32/B34/B38/B39/B40/B41/B42/B43/B48/B66

WCDMA:B1/B2/B3/B4/B5/B8/B19

LTE : Down 1.0 Gbps;UP 200 Mbps

Antenna type: external 5G/4G main set, diversity omnidirectional

WiFi 1200Mbps(802.11AC)

Working Radio: #1: 300Mbps @ 2.4GHz; #2: 900Mbps @5.1-5.8GHz

Coding Technology:1024-QAM / OFDMA

Peak Connections:>500+ Clients

Wi-Fi Standard Conformance:WiFi 802.11ac/802.11n backward

Hardware Specification

CPU:MT7621+ MT7612+MT7603

Memory:16MB + 256MB DDR3

Ethernet:1x1Gbps WAN,2xLAN 1Gbps

1xSIM Slot

1xMINIPCIE

1xM2

1xSD card slot

Reset button

LED Indicator

4G5G Status

Power Status

2.4G LED

5.8G LED

General

Power Consumption:<24W

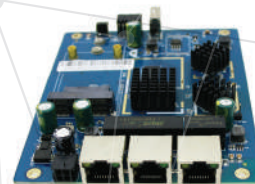
DC Power Supply: 15V POE or 48V POE

Working temperature:0°C~40°C, Storage temperature: 20°C~+70°C

Humidity:5%~95%

Dimensions:

Weight: TBD



Data Switching

Mobile 4G/5G Connection (Support APN)
 Giga Ethernet Connection
 2.4G/5GHz WiFi
 Advanced Firewall
 MAC Filter
 WiFi Security
 VPN Passthrough and VPN Client (L2TP PPTP)
 IPV4/IPV6
 WEB / APP Mangement
 Firmware upgrade

Technical Specifications

Model WS1209-H
 CPU MT7621
 Flash 16MB + 256MB FI
 WiFi Frequency band 2.4G&5G
 WiFi 2.4G: 802.11b/g/n 5.8GHz:802.11a/n/ac MIMO
 WiFi rate 2.4GHz :300Mbps ,5GHz :900Mbps
 5G Standard 3GPP Release 15 NSA/SA operation, Sub-6 GHz
 5G Networking method NSA/SA
 5G SA Transmission Speed:2.1Gbps/900Mbps (up to ISPs)
 5G/4G rate 5G NSA Transmission Speed:2.5Gbps/650Mbps (up to ISPs)
 LTE : Down 1.0 Gbps;UP 200 Mbps
 5G NR NSA n1/n2/n3/n5/n7/n8/n12/n20/n25/n28/n38/n40/n41/n48*/n66/n71/n77/n78/n79
 5G NR SA
 5G Frequency band
 n1/n2/n3/n5/n7/n8/n12/n20/n25/n28/n38/n40/n41/n48*/n66/n71/n77/n78/n79
 MIMO
 Down:4 × 4 MIMO on
 n1/n2/n3/n7/n25/n38/n40/n41/n48/n66/n77/n78/n79
 UP:2 × 2 MIMO on n41

WIFI EVM

802 . 11g @5 4M: ≤ -3 0 dB
 802 . 11b @1 1M: ≤ -1 5 dB
 802 . 11a@54 M: ≤ -28 dB
 802 . 11ac @MCS9: ≤ -3 3 dB
 Size 1x10/100M/1000 LAN mouth

LTE Category

Down Cat 16/ UP Cat 18
 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
 4G Frequency band LAA
 B46(Only supports 2 × 2 MIMO)
 Down 4 × 4 MIMO
 B1/B2/B3/B4/B7/B25/B30/B32/B34/B38/39/B40/B41/B42/B43/B48/B66
 WCDMA
 B1/B2/B3/B4/B5/B6/B8/B19
 5G:Modulation mode GMSK/8PSK/BPSK/QPSK/16QAM/64QAM/256QAM

Interface

1x48V POE interface
 Reset button Reset button (long press for 10 seconds to restore the default factory configuration)
 Status Indicator Power light, breathing indicator, WiFi indicator
 Working power <24W
 Working temperature: -20°C~+50°C
 Working environment Storage temperature: -40°C~+70°C
 Humidity: 5%~95% (non-condensing)
 Weight TBD

Software function

IPV4 support
 IPV6 support
 Smart QOS support
 Parental Controls support
 UPNP support
 Supports L2TP VPN client
 VPN Supports PPTP VPN client
 APN support
 DDNS support
 DMZ support
 Port Mapping support



WIFI

1024-QAM / OFDMA

Formats and

Ant0 (DB) Ant1 (DB)

Channels

80.211B 25 25

80.211G 23.9 23.8

2.4G

80.211N20 23 23

80.211N40 23 23

80.211AC20 22 22

80.211AC40 21 21

Formats

Ant 0 (D B) Ant 1 (D B) Ant 2 (D B) Ant 3 (D B)

11 a54M 24 24 24 24

11 n2 0MCS0 23 23 23 23

WIFI Power 11 n2 0MCS7 23 23 23 23

11 n4 0MCS0 23 23 23 23

11 n4 0MCS7 22 22 22 22

11 ac20MCS0 23 23 23 23

11 ac20MCS8 21 21 21 21

5G 11 ac40MCS0 21 21 21 21

11 ac40MCS9 20.5 20.5 20.5 20.5

11 ac80MCS0 20 20 20 20

11 ac80MCS9 19.5 19.5 19.5 19.5

2.4 G: 11 X HE20: -70dBm@MCS11 , -8 0dBm@MCS0 .

11 X HE40: -7 0dBm@MCS 11 , - 80 dBm@MCS0 .

11n HT20 : -7 0dBm@MCS7 , -8 0dBm@MCS0 .

11n HT40 : -7 0dBm@MCS7 , -7 8dBm@MCS0 .

11g: -68 dBm@54Mbps,-8 2dBm@6Mbps .

WIFI receiving 11b: -70 dBm@11Mbps,-8 5dBm@1Mbps .
sensitivity

5.8 G: 11a: -72 dBm@54Mbps, -8 5dBm@6Mbps .

11nHT2 0: -75 dBm@MCS7 , - 85dBm@MCS0 .

11nHT4 0: -75 dBm@MCS7 , - 88dBm@MCS0

11ac HT80 : -6 5dBm@MCS9

802 . 11n@MCS7 : ≤ -3 0 dB

4G LTE Technology

LTE-FDD Bands:

B1/B2/B3/B4/B5/B7/B8/B12/B13/B14/B17/B18/B19/B20/B25/B26/B28/B29/B30/B32/B66/B71

LTE-TDD Bands: B34/B38/B39/B40/B41/B42/B43/B48

4G Frequency Bands (LAA):

B46 (Supports 2 × 2 MIMO)

Down 4 × 4 MIMO: B1/B2/B3/B4/B7/B25/B30/B32/B34/B38/B39/B40/B41/B42/B43/B48/B66

WCDMA Bands: B1/B2/B3/B4/B5/B6/B8/B19

5G NR Technology:

5G Standard:

3GPP Release 15

NSA/SA operation, Sub-6 GHz

5G Networking:

NSA/SA

5G SA Transmission Speed:

2.1Gbps/900Mbps (up to ISPs)

5G NSA Transmission Speed:

2.5Gbps/650Mbps (up to ISPs)

5G NR Bands (NSA and SA):

n1/n2/n3/n5/n7/n8/n12/n20/n25/n28/n38/n40/n41/n48*/n66/n71/n77/n78/n79

MIMO Technology:

Down: 4 × 4 MIMO on

n1/n2/n3/n7/n25/n38/n40/n41/n48/n66/n77/n78/n79

UP: 2 × 2 MIMO on n41

5G Modulation Modes:

GMSK/8PSK/BPSK/QPSK/16QAM/64QAM/256QAM

5G Cellular Details:

5G Baseband: Qualcomm® SnapdragonTM X55 Modem-RF System

5G Network Modes: SA (Standalone), NSA (Non-Standalone)

5G Standards: 3GPP Release 15

5G SA Transmission Speed: 2.1Gbps/900Mbps (up to ISPs)

5G NSA Transmission Speed: 2.5Gbps/650Mbps (up to ISPs)

Experience the future of connectivity with iQsim NetLink Fortress.
Elevate your connection speed and versatility.
- Wherever. Whenever.