



Data Sheet

NetLink Fortress®

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 with Zero Configuration

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.



Industrial Strength

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



Remote Management Platform

Enjoy total device management from our 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.



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.

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

Contact Us

Email: sales@iqsim.com

Phone: + 1 908-389-8202

Whatsapp: +1 (442) 235-2794

Product Specifications

Shell characteristics:

- 1) All-metal aluminum alloy is integrally formed, explosion-proof, waterproof, and corrosion-proof. The waterproof level supports IP66 waterproof level
- 2) 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
- 3) The power, internet, 4G/5G instructions are clear at a glance.
- 4) External waterproof grade Gigabit Ethernet LAN port.

5G Cellular

- 1) 5G Baseband: Qualcomm® Snapdragon™ X55 Modem-RF System
- 2) 5G Network Modes: SA (standalone), NSA (non-standalone)
- 3) 5G NSA Bands: n1/n2/n3/n5/n7/n8/n12/n20/n25/n28/n38/n40/n41/n48*/n66/n71/n77/n78/n79
- 4) 5G SA Bands: n1/n2/n3/n5/n7/n8/n12/n20/n25/n28/n38/n40/n41/n48*/n66/n71/n77/n78/n79
- 5) 5G Standards: 3GPP Release 15
- 6) 5G SA Transmission Speed: 2.1Gbps/900Mbps (up to ISPs)
- 7) 5G NSA Transmission Speed: 2.5Gbps/650Mbps (up to ISPs)

*: under development / in progress.

4G Cellular

- 8) LTE Category: Down Cat 16/ UP Cat 18
- 9) LTE-FDD: B1/B2/B3/B4/B5/B7/B8/B12/B13/B14/B17/B18/B19/B20/B25/B26/B28/B29/B30/B32/B66/B71
- 10) LTE-TDD: B34/B38/B39/B40/B41/B42/B43/B48
- 11) LTE Down 4x4 MIMO: B1/B2/B3/B4/B7/B25/B30/B32/B34/B38/B39/B40/B41/B42/B43/B48/B66
- 12) WCDMA: B1/B2/B3/B4/B5/B8/B19
- 13) LTE : Down 1.0 Gbps; UP 200 Mbps

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

WiFi Datasheet

WiFi 1200Mbps (802.11AC)

- 1) Working Radio: #1:300Mbps @ 2.4GHz; #2:900Mbps @ 5.1-5.8GHz
- 2) Coding Technology: 1024-QAM / OFDMA
- 3) Peak Connections: >500+ Clients
- 4) Wi-Fi Standard Conformance: WiFi 802.11ac / 802.11n backward

Data Switching

- 1) Mobile 4G/5G Connection (Support APN)
- 2) Giga Ethernet Connection
- 3) 2.4G/5Ghz WiFi
- 4) Advanced Firewall
- 5) MAC Filter
- 6) WiFi Security
- 7) VPN Passthrough and VPN Client (L2TP PPTP)
- 8) IPV4/IPV6
- 9) WEB / APP Management
- 10) Firmware upgrade

Hardware Specifications

- 1) CPU: MT7621+ MT7612+ MT7603
- 2) Memory: 16MB + 256MB DDR3
- 3) Ethernet: 1x1Gbps WAN, 2 x LAN 1Gbps
- 4) 1x SIM Slot
- 5) 1x MINIPCI-E
- 6) 1x M2
- 7) 1x SD card slot
- 8) Reset button
- 9) LED Indicator
 - 4G/5G Status
 - Power Status
 - 2.4G LED
 - 5.8G LED
- 10) 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%
 - Weight: TBD

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/4G Rate

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

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

LTE : Down 1.0 Gbps;UP 200 Mbps

5G Frequency Band

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

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/
n77/n78/n79

UP:2 × 2 MIMO on n41

4G Frequency Band

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

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

Modulation mode

5G

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

WIFI

1024-QAM / OFDMA

WiFi Power: 2.4G

Formats & Channels	Ant0 (DB)	Ant1 (DB)
80.211B	25	25
80.211G	23.9	23.8
80.211N20	23	23
80.211N40	23	23
80.211AC20	22	22
80.211AC40	21	21

WiFi Power: 5G

Formats & channels	Ant0 (DB)	Ant1 (DB)	Ant2 (DB)	Ant3 (DB)
11 a54M	24	24	24	24
11 n2 0MCS0	23	23	23	23
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
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

WiFi Receiving Sensitivity

2.4 G: 11 X HE20: -70dBm@MCS11 , -80dBm@MCS0 .

11 X HE40: -70dBm@MCS11 , -80dBm@MCS0 .

11n HT20 : -70dBm@MCS7, -80dBm@MCS0 .

11n HT40 : -70dBm@MCS7, -78dBm@MCS0 .

11g: -68dBm@54Mbps, -82dBm@6Mbps .

11b: -70dBm@11Mbps, -85dBm@1Mbps .

5.8 G: 11a: -72dBm@54Mbps, -85dBm@6Mbps .

11nHT20: -75dBm@MCS7 , -85dBm@MCS0 .

11nHT40: -75dBm@MCS7 , -88dBm@MCS0

11ac HT80 : -65dBm@MCS9

WiFi EVM

802.11n @MCS7 : ≤ -30dB

802.11g @54M: ≤ -30dB

802.11b @11M: ≤ -15dB

802.11a @54M: ≤ -28dB

802.11ac @MCS9: ≤ -33dB

Software Function

Interface

1x10/100M/1000 LAN mouth

1x 48V 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 Environment

Working temperature: -20°C~+50°C

Storage temperature: -40°C~+70°C

Humidity: 5%~95% (non-condensing)

Weight

TBD

IPV4

Support

IPV6

Support

Smart QOS

Support

UPNP

Support

VPN

Supports L2TP VPN client

Supports PPTP VPN client

APN

Support

DDNS

Support

DMZ

Support

Port Mapping

Support



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