



PRODUCT HIGHLIGHTS AND ADVANTAGES

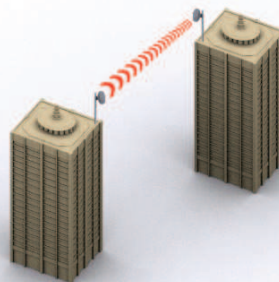
- Licence Exempt ETSI and FCC 5 GHz Frequency – eliminates regulatory delays.
- 11 (ETSI), 4 (United Kingdom), 5 (USA), 236 (Unregulated Countries) non-overlapping channels allows many units to be deployed in the same area.
- User selectable channel width – 20 MHz or 40 MHz for scalable deployment and interference resiliency.
- Superior interference immunity allow efficient operation in even extremely noisy areas.
- Over 95 Mbps Full Duplex real TCP/IP speed, up to 300 Mbps raw datarate and over 45,000 packets per second.
- Built in High Gain Dual Polarized Dish Antenna for ultra long range high speed operation.
- Next day deployment enables rapid service activation and payback.
- Cost effective alternative to leased lines.
- Outstanding software features: bridging, routing, SNMP, VLAN management, WEB Management and high grade encryption.
- Optimal cost / performance ratio: highly cost efficient solution.
- Dynamic Frequency Selection (DFS) complies with ETSI EN 301 893 and OFCOM regulations to allow co-existence with Radar systems.
- Robust metal enclosure and UV protected integrated antenna radome: ensures un-precedented reliability and years of operation.
- Superior Atheros XSPAN AR9001 powered OFDM radio – enables NLOS (near line of sight) operation in dense urban environments.
- Non-compromising security - over the air 128 bit key AES encryption.
- Built-in Software Spectrum Analyzer helps selecting proper channel for best performance.
- Compact integrated solution – easy to install and operate.

AirJet 5N-25

Long Range Outdoor Wireless MiMO Ethernet Bridge



The **NETBRIDGE AirJet 5N-25**, a member of **NETBRIDGE 5N** products family, is a **Long Range High Performance 5GHz MiMo** outdoor wireless bridge designed to provide secure and reliable point to point operation for Carriers, Internet Service Providers, Business Enterprises and Government organisations.



The **NETBRIDGE AirJet 5N-25** is capable of operating as a multi-mac ethernet L2 bridge to another **NETBRIDGE AirJet 5N-25**, supporting **over 95 Mbps TCP/IP Full Duplex Net Throughput** (up to 180 Mbps Half Duplex) over its air interface and **up to 300 Mbps Raw Datarate**. The **NETBRIDGE AirJet 5N-25** leverages both robust outdoor technologies and Orthogonal Frequency Division Multiplexing (OFDM) modulation with **2Tx2Rx Atheros XSPAN MiMo Technology** - with features such as Forward Error Correction coding, the product operates seamlessly and efficiently in challenging and **high noise environments with stable throughput**. The system also features advanced algorithms for automatic selection of modulation schemes and antenna chains to maximize data rate and improve spectral efficiency.

These inherent advantages of the **NETBRIDGE AirJet 5N-25** enable service providers to offer an effective PtP solutions to a significantly higher subscriber base, at very high effective speeds, in high interference areas, that would otherwise be inaccessible or very thard to reach.

Using Features such as Packet Aggregation two **NETBRIDGE AirJet 5N-25 bridges** operating in Point to Point mode handle over 40,000 packets per second. Combining high frequency reuse, selectable channel width with advanced interference management and immunity techniques, the **NETBRIDGE AirJet 5N-25 conserve valuable spectrum** by allowing service provider to cover an extensive geographical area with a minimum number of channels.

NETBRIDGE AirJet 5N-25 software features such as bridging, routing, Point to Point Bridge mode, VLAN Management, SNMP, Packet Aggregation, Built-in Spectrum Analyzer, WEB GUI Management, high grade encryption, and built in troubleshooting utilities make this device one of the most flexible and cost effective broadband wireless platforms available today.

All **NETBRIDGE AirJet 5N-25** products are **robust** outdoor units, built to perform in difficult climatic environments and withstand even the harshest weather conditions. Built in passive 802.3af Power over Ethernet system allows only one ethernet cable to be used for both data and power transmission for up to 305 feet.

Datasheet

AirJet 5N-25



Interface

Ethernet Interface	100 base-T Ethernet (RJ-45) with PoE
Wired LAN Protocol	IEEE 802.3 (CSMA/CD)
Wireless Interface	OFDM
Wireless LAN Protocol	IEEE 802.11a/n, 802.11a/n Turbo

Radio

Supported Frequencies (User Configurable)	Europe (ETSI): 5500 - 5700 MHz (11 channels) with DFS (Dynamic Frequency Selection)
	USA (FCC): 5745 - 5825 MHz (5 channels)
	UK (OFCOM FWA): 5735 - 5835 MHz (4 channels) with DFS (Dynamic Frequency Selection)
	Africa&Asia (OTHER): 4920 - 6100 MHz (236 channels, 5 MHz step)
Modulation Technique	BPSK, QPSK, 16QAM, 64QAM, HT20, HT40
Channel Width	User Selectable – 40 MHz, 20 MHz, 10 MHz or 5 MHz
Output Power	
	ETSI: ≤ 30 dBm EIRP
	OFCOM: ≤ 33 dBm EIRP
	FCC, Africa: ≤ 48 dBm EIRP
Bit Data Rate (40 MHz channel, 2 Streams, GI=1)	300 Mbps 270 Mbps 240 Mbps 180 Mbps 120 Mbps 90 Mbps 60 Mbps 30 Mbps
Receive Threshold (including built-in antenna)	-109 dBm -111 dBm -113 dBm -117 dBm -120 dBm -123 dBm -125 dBm -128 dBm

System

Processor	AR7161 MIPS 24Kc Processor Core
Memory	4MB FLASH, 32MB SDRAM
RF Module	Atheros AR5006 with XR Technology

Software

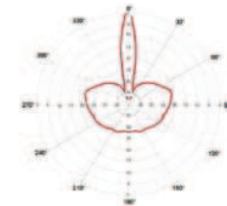
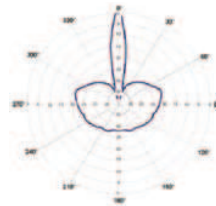
Operational Modes	Point to Point Bridge Master, Point to Point Bridge Slave
Security	Association Protocol – ESSID/BSSID, WEP 40/128, TKIP, AES
Features	Bridge, Router, VLAN Management, Packet Aggregation, Spectrum Analyzer
Management	WEB Interface, SNMPv2

Physical

Dimensions	370 mm X 370 mm X 140 mm
Operating / Storage Temperature	-40°C - +80°C / -40°C - +85°C
Enclosure	Outdoor IP67 Rated, Outdoor Mountable, Weather Protected
Power Adapter	48V / 0.4A DC, Passive Ethernet (Power over Ethernet Injector included)
LEDs	2 – Power, Ethernet LAN Activity
Mounting	Adjustable Pole Mounting

Antenna

Type	≤ 25dBi Dual Polarized Panel Antenna
Built-in Antenna Patterns	E-Plane H-Plane



Operational Distance

Bit Data Rate (40 MHz channel, 2 Streams, GI=1)	300 Mbps	270 Mbps	240 Mbps	180 Mbps	120 Mbps	90 Mbps	60 Mbps	30 Mbps
NETBRIDGE AirJet 5N-25 (distance in meters)	11800	15100	17600	21900	24900	27600	31200	34000

Regulatory Compliance

E mark, ETSI EN 301 893 Compliant, FCC Part 15 Compliant

Warranty

Two years, Limited

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