Newbridge

WaveStation 3822-N

Dual-Band Wi-Fi Access Point

High Performance, 802.11n Dual-Band
Mid-Range Smart Wi-Fi Access Points

Overview

Newbridge WaveStation 3822-N is the indoor ceiling mount wireless access point delivers high performance by integrating 2 (2.4GHz and 5GHz) modular radios. As a FAT AP, WaveStation 3822-N can run in standalone mode while as a FIT AP, WaveStation 3822-N must be used together with wireless controller.

WaveStation 3822-N designed with enhanced RF transmission technology, provides greater coverage and higher signal quality, and can be widely used in carrier, enterprise, industry and other markets.

WaveStation 3822-N support 802.11a/b/g/n protocol standard, built-in IEEE 802.11n 2.4GHz and 5GHz 2x2 MIMO RF radio frequency, support up to 600Mbps data transfer rate.

WaveStation 3822-N uses the industry best chipset and component in order to provide excellent performance and competitive price. Designed with plastic shell and aluminum base, help enhanced cooling effect, built-in antenna, support both ceiling and wall installation. Using elegant flying saucer design, multi-vents designed to effectively remove heat, extend equipment life.

WaveStation 3822-N uses green energy-saving design, providing 500mW transmit power at the same time, the whole power consumption of less than 16W, supports PoE+ power input.

Features

Band steering

WaveStation 3822-N support spectrum radio navigation feature which guide and initiate association with dual-band client. When 5GHz RF having less online client, dual band client will be redirect to the 5GHz radio. Same apply to 2.4GHz RF, when 2.4GHz RF having less online client, dual band client will be redirect to the 2.4GHz radio.

Multicast optimization

Multicast optimization convert multicast packet of destination address into unicast packet. With this wireless forwarding, it helps achieve high speed forwarding multicast members, optimized wireless multicast data forwarding.

Roaming steering

Client roaming can be navigating through reject weak signal access and clients reconnect trigger features. Reject weak signal access can effectively prevent the access of client with weak signal, purpose of doing so is to guide the client is associated to a stronger RF signal. When a wireless client moves from one coverage area to another RF coverage area, original coverage signal will become less, which caused degrade network connectivity. Client reconnect trigger help initiate and trigger the client connect to a stronger RF signal.

Enhanced RF technology

Support maximum transmit power of 27dBm (EIRP), provides greater coverage, reducing deployment density. With high-gain internal antenna, covering more than 900 square meters meeting place and studio. Improved receiver sensitivity, provide better communication with the tablet, mobile phones and other

handheld devices.

High performance

Use IEEE 802.11n 2x2 MIMO wireless module, support maximum data transfer rate up to 300Mbps per Radio, and provide high-speed broadband access to client. With 2.4GHz and 5GHz multi-radio design, it support maximum number of users up to 4 times than normal AP's.

High level of protection design

IP31 waterproof and dustproof protection design, provide high reliability design.

Dynamic rate limit

Supports automatic adjustment of rate limit based on the number of online clients, increase or decrease of client will have readjustment of rate limit.

Easy to use and easy maintenance

Under distributed deployment, WaveManager can be used to unify wireless access point software.

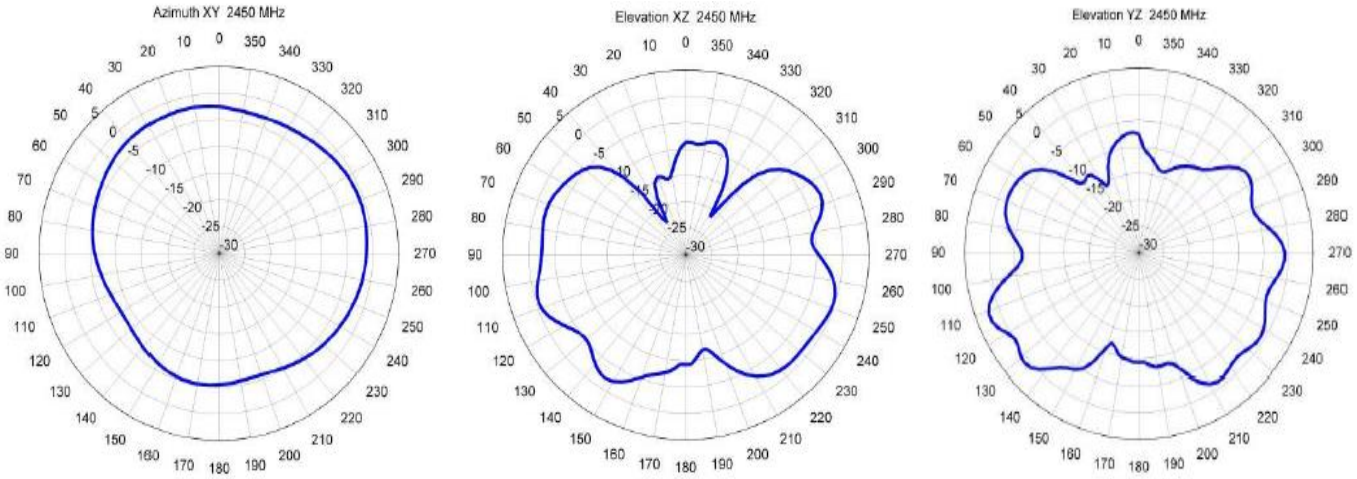
Under centralized deployment, WaveController allow unified configuration, RF strategic planning and software version upgrades.

Both distributed and centralized deployment can be used to detect AP failure through the WaveManager software, hence reduce resolution and troubleshooting time.

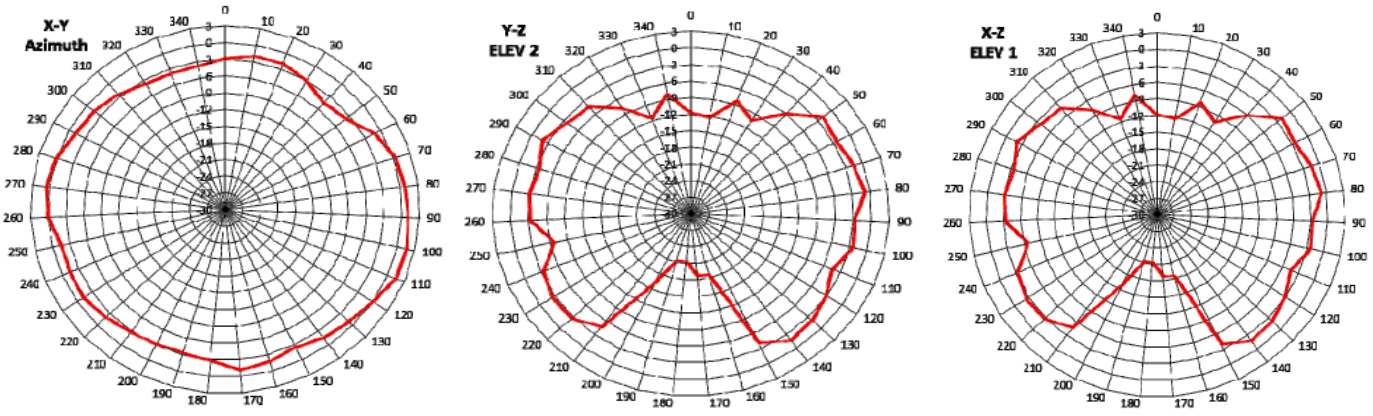
Supporting user isolation policy

The WaveStation 3822-N support wireless user isolation from another. After this function is enabled, the two wireless clients cannot directly communicate with each other so that they are shifted to access the upstream wireline network. With this function, operators can force wireless users to be charged or authenticated on the specified gateway or server, thus providing hot spot applications.

2.4G Radio Pattern



5G Radio Pattern



Specifications

Hardware

Parameter	WaveStation 3822-N
Power Supply	• 802.3at POE power supply (48-56V DC)
Dimensions	• 200mm (H) 200mm (W) 45mm (D)
Weight	• 1000 g
Front-End Interface	• 1-port RJ45 10/100/1000Base-T POE+ Ethernet Port
Power Consumption	• 16W (Typical)
Protection Degree	• IP31
Fire Rating	• Flammability rating of V-0
Memory	• 128 MB
Flash	• 16 MB
Operating Temperature	• 0ºC–55ºC
Operating Humidity	• 0%–100% (Non-condensing)
Storage Temperature	• -40ºC–85ºC
Installation	• Ceiling or wall mounted
Frequency Band	• 2.400 GHz-2.4835 GHz • 5.15 GHz-5.35 GHz • 5.47 GHz-5.725 GHz • 5.725 GHz-5.85 GHz
Wireless Standard	• IEEE802.11a/b/g/n
EIRP Throughput (Equivalent Isotropic ally Radiated Power)	• 27dBm, Max
Transmit Power*	802.11/b/g/n • 11b 27dBm • 6-54 Mbps 27dBm • MCS0-7 27dBm 802.11a/n • 6-54 Mbps 23dBm • MCS0-7 23dBm
Data Rates	802.11n: • 6.5 Mbps – 144 Mbps (20MHz) • 13 Mbps – 300 Mbps (40MHz) 802.11a/g: • 54/48/36/24/18/12/9/6 Mbps 802.11b: • 11/5.5/2/1 Mbps
Aggregated Throughput	• 600 Mbps
Maximum Associated Users	• 256
Radio Chains/Spatial Streams	• 2x2:2
Antenna	• Integrated antenna, 2x2 MIMO
Direction	• Vertical Polarization
Antenna Gain	• 2.3 dBi for 2.4 GHz Antenna • 3.8 dBi for 5 GHz Antenna

Software

Parameter	WaveStation 3822-N
Position	• Indoor FIT/ FAT AP
IEEE802.11a/b/g/n	• Supporting IEEE802.11a/b/g/n
Network Features	• Each RF support 30 x BSSID and ESSID • Support WDS TDCA • Support WLAN QoS • Support Rate Limiting • Support WMM • Support 802.1Q VLAN • Support DHCP Server • Support Spectrum Analysis • Support Spectrum Navigation • Support Roaming Navigation • Support NTP • Support DDNS
Management Features	• Support Web management • Support SNMP • Support Telnet • Support remote software upgrade • Support batch upgrade • Support FTP, TFTP • Support Remote Syslog • Support console and debugging
Certificate and Security Features	• Build in Firewall • WPA/WPA2 (PSK, EAP) • WEP 64/128 bit encryption • MAC address filtering (Black/White list) • Standard RADIUS server interface • RADIUS data encryption

* Maximum power varies by countries.

Order Information

BOM Code	Description
NB3822-WW	WaveStation 3822-N dual-band (2.4 GHz & 5 GHz Concurrent) 802.11n Ceiling Mount Wireless Access Point, 2x2:2 SS
NB3822-WS	WaveSupport Advance Hardware Replacement for WaveStation 3822-N,1 year
NB3822-PWS	Partner WaveSupport For WaveStation 3822-N, 1 year

Visit www.newbridgewireless.net for more information about Newbridge Enterprise Wireless Solutions.

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