



Newbridge

WaveStation 3922 AC

Dual-Band Wi-Fi Access Point



High Performance, 802.11ac Dual-Band Smart Wi-Fi Access Points

Overview

Newbridge WaveStation 3922-AC is the indoor ceiling mount wireless access point delivers high performance by integrating 2 (2.4 GHz and 5 GHz) modular radios. As a FAT AP, WaveStation 3922-AC can run in standalone mode while as a FIT AP, WaveStation 3922-AC must be used together with wireless controller.

WaveStation 3922-AC 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 3922-AC support 802.11a/b/g/n/ac protocol standard, built-in IEEE 802.11ac 2.4 GHz and 5 GHz 2x2 MIMO RF radio frequency, support up to 1.17 Gbps data transfer rate.

WaveStation 3922-AC 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 3922-AC 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 3922-AC support spectrum radio navigation feature which guide and initiate association with dual-band client. When 5 GHz RF having less online client, dual band client will be redirect to the 5 GHz radio. Same apply to 2.4 GHz RF, when 2.4 GHz RF having less online client, dual band client will be redirect to the 2.4 GHz 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 20 dBm (EIRP), provides greater coverage, reducing deployment density and improve receiver sensitivity, provide better communication with the tablet, mobile phones and other handheld devices.

High performance

Use IEEE 802.11ac 2x2 MIMO wireless module, support maximum data transfer rate up to 866 Mbps per 5 GHz Radio, 300 Mbps per 2.4 GHz Radio, provide high-speed broadband access to client. Uses 2.4 GHz and 5 GHz multi-radio designed, 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.

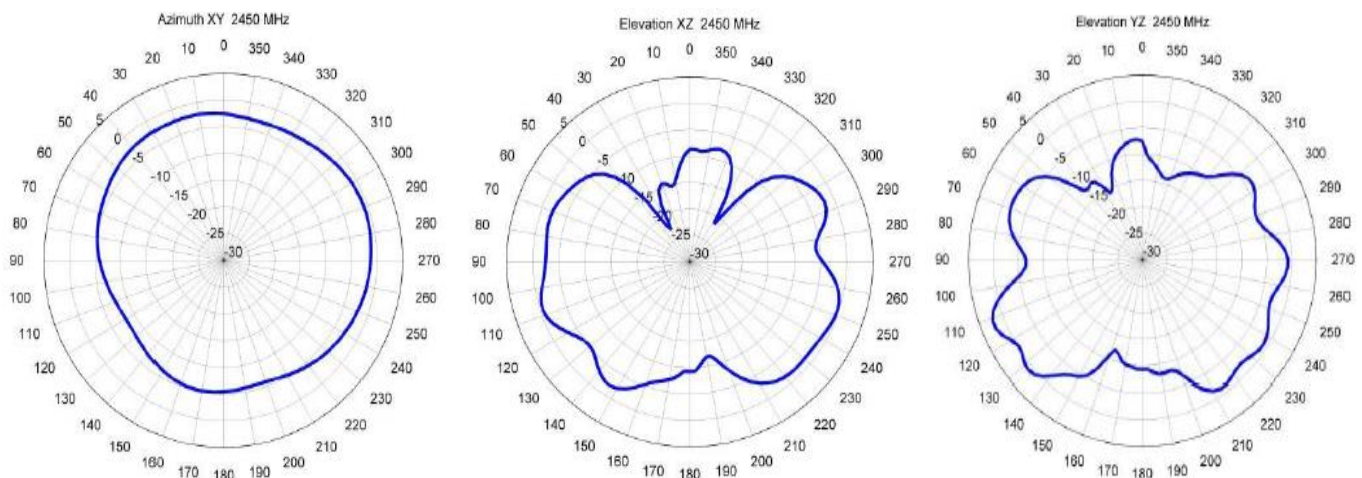
Under centralized deployment, WaveController allow unified configuration, RF strategic planning and software version upgrades.

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

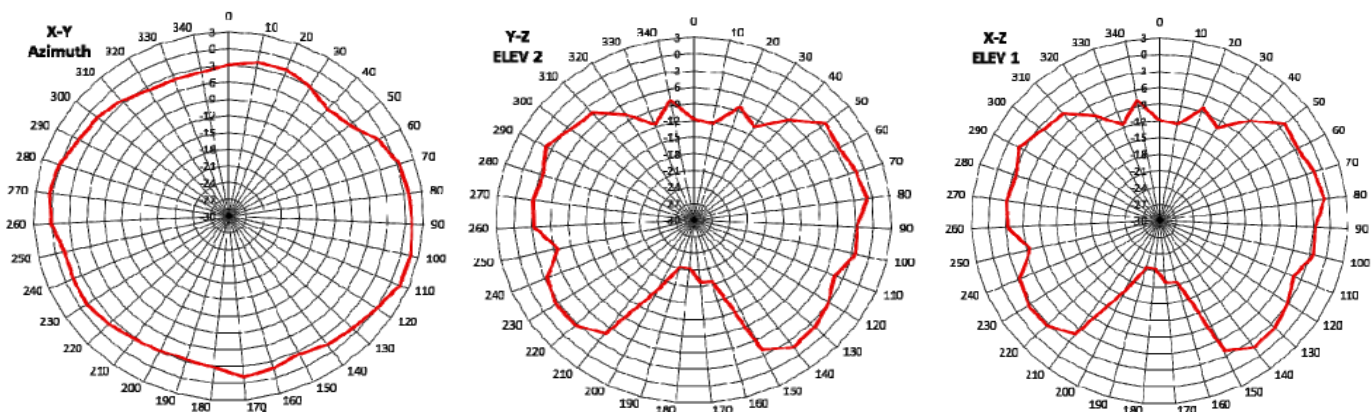
Supporting user isolation policy

The WaveStation 3922-AC 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.

2.4 G Radio Pattern



5 G Radio Pattern



Specifications

Hardware

Parameter	WaveStation 3922-AC
Power Supply	<ul style="list-style-type: none"> 802.3 at/af POE+ power supply (48 VDC)
Dimensions	<ul style="list-style-type: none"> 16.8 cm (H), 16.8 cm (W), 3 cm (D)
Weight	<ul style="list-style-type: none"> 280 g
Front-End Interface	<ul style="list-style-type: none"> 1-port RJ45 auto MDX, 10/100/1000Base-T POE+ Ethernet Port
Power Consumption	<ul style="list-style-type: none"> 6 W (Typical)
Protection Degree	<ul style="list-style-type: none"> IP31
Fire Rating	<ul style="list-style-type: none"> Flammability rating of V-0
Memory	<ul style="list-style-type: none"> 128 MB
Flash	<ul style="list-style-type: none"> 16 MB
Operating Temperature	<ul style="list-style-type: none"> 0°C–45°C
Operating Humidity	<ul style="list-style-type: none"> 0%–95% (Non-condensing)
Installation	<ul style="list-style-type: none"> Ceiling or wall mounted
Frequency Band	<ul style="list-style-type: none"> IEEE 802.11ac: 5.15 – 5.85 GHz IEEE 802.11a/n: 5.15 – 5.85 GHz IEEE 802.11b/g/n: 2.4 – 2.4835 GHz
Wireless Standard	<ul style="list-style-type: none"> IEEE802.11a/b/g/n/ac
Maximum Transmit Power*	<ul style="list-style-type: none"> 20 dBm on 2.4 GHz 20 dBm on 5 GHz
EIRP Throughput* (Equivalent Isotropic ally Radiated Power)*	<ul style="list-style-type: none"> 23 dBm on 2.4 GHz 23 dBm on 5 GHz
Supported Data Rates	<ul style="list-style-type: none"> 802.11ac: 29.3 Mbps – 867 Mbps (80MHz) 802.11n: 6.5 Mbps – 144.4 Mbps(20MHz) 13.5 Mbps – 300 Mbps (40MHz) 802.11a: 54, 48, 36, 24, 18, 12, 9 and 6 Mbps 802.11b: 11, 5.5, 2 and 1 Mbps 802.11g: 54, 48, 36, 24, 18, 12, 9 and 6 Mbps
Receiving Sensitivity (Rx)	<ul style="list-style-type: none"> -96 dBm
Channelization	<ul style="list-style-type: none"> 20 MHz, 40 MHz, and/or 80 MHz
Radio Chains/Spatial Streams	<ul style="list-style-type: none"> 2 x2:2 MIMO
Antenna Type	<ul style="list-style-type: none"> Integrated 4 Omni antenna
Direction	<ul style="list-style-type: none"> Vertical Polarization
Concurrent users	<ul style="list-style-type: none"> 128 client per radip, up to 256 clients per AP
Aggregated Throughput	<ul style="list-style-type: none"> 1.167 Gbps per AP
Antenna Gain	<ul style="list-style-type: none"> 3 dBi for 2.4 GHz Antenna 3 dBi for 5 GHz Antenna

Software

Parameter	WaveStation 3922-AC
Position	<ul style="list-style-type: none"> Indoor FIT/ FAT AP
IEEE802.11	<ul style="list-style-type: none"> Supporting IEEE802.11b/g/n/ac

Parameter	WaveStation 3922-AC
Network Features	<ul style="list-style-type: none"> • Support BSSID up to 8 (2.4 GHz) • Support BSSID up to 8 (5 GHz) • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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
WS3922-WW	Newbridge WaveStation 3922 AC dual-band Concurrent (2.4 GHz & 5 GHz) 802.11ac Ceiling Mount Wireless Access Point, 2x2:2 SS, 10/100/100BaseT, POE
WS3922-WS-1Y	Newbridge WaveSupport 3922 AHR1y
WS3922-WS-3Y	Newbridge WaveSupport 3922 AHR3y

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