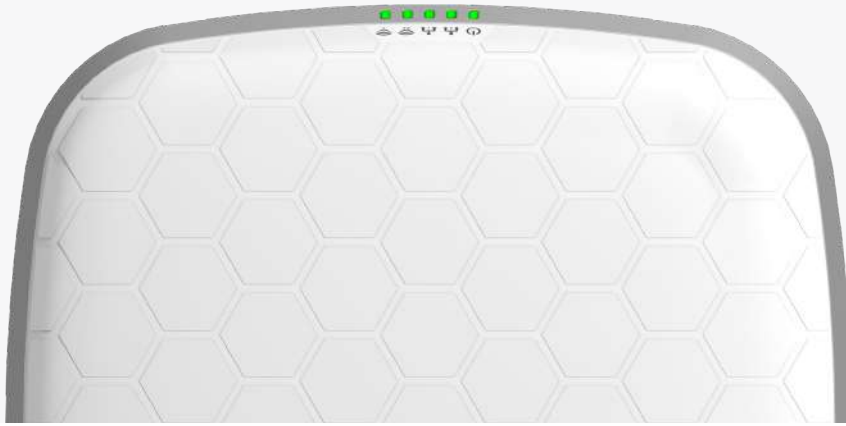# LigoWave

NFT 3ac Lite

High Performance Dual-Radio 802.11ac Access Point

NFT 3ac Lite

The Infinity NFT 3ac Lite is a high-performance dual-radio access point from LigoWave, equipped with two 3×3 MIMO 802.11ac radios operating in the 2.4 and 5GHz bands concurrently. A dedicated Qualcomm Atheros AR9558 CPU (720MHz) makes this AP ideal for enterprise capacity demanding applications reaching 450Mbps data rate on a 2.4GHz radio and 1300Mbps data rate on a 5GHz radio. There are two Gigabit Ethernet ports and one of them supports 802.3af/at standard for easy and quick deployment using PoE switches.

Infinity Controller

The Infinity Controller is an intuitive product and network management platform for your NFT devices. It allows easy, simple, and fast network installation, configuration, and control, all of which can be performed using a web browser.

The Controller also facilitates network maintenance and expansion by automating these processes. The management platform can function as an integrated controller or as an external one (i.e. Infinity Cloud Controller), thus serving as an optimal solution for setting up and managing networks of any size.

Easy Mesh

Easy Mesh is LigoWave's solution to wireless network coverage expansion and device configuration automation. This feature is designed for the NFT Series (as well as DLB devices utilizing NFT firmware) and is only available on the External Infinity Controller.

The Infinity Controller allows users to set up an Easy Mesh network in a plain and simple way: just have at least one LAN-connected AP, create a new Easy Mesh network, assign devices to it, and you are good to go!
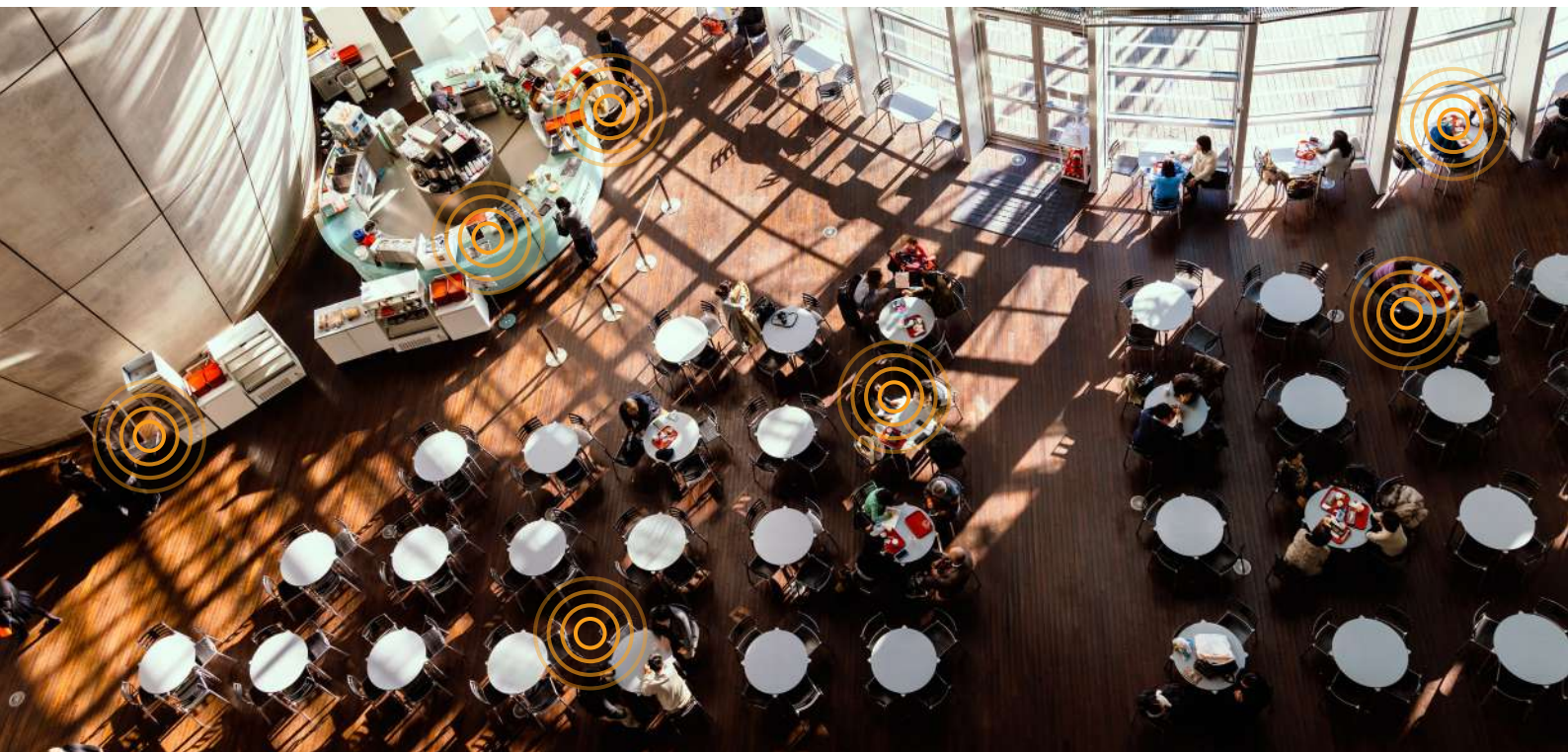
Proximity

LigoWave access points have an integrated mobile device detection feature. This means that any device within range can be logged using the MAC address and date/time without any user interaction.

The data is exported in real time and can be used to improve the services of an enterprise or managed service provider by importing them into proprietary applications for analytics and insights. An API is available upon request.

Our website provides information on LigoWave's technological partners that are using this functionality Several of our technological partners are already using this functionality.

Automated Device Onboarding

Automated device onboarding (ADO) is the process of automatically setting up Infinity access points that are introduced to the network. Not only does ADO eliminate the discrepancies caused by manual setup, but it also simplifies the deployment process and saves valuable time.

Automated device onboarding requires one-time configuration of the Cloud AP, after which the settings are automatically applied to all Infinity access points that are newly-connected to the network using a physical connection.

Flexible Network Scaling

The External Infinity Controller is designed with various types of networks in mind, whether they contain just a few access points or thousands of them.

Networks can be categorized into different logical groups (up to 4 layers) based on geographical location, service type, company branch, or other criteria. Each group can have different configurations assigned to them and access points can easily migrate between networks.

Furthermore, the External NFT Controller (installed on customer premises) supports multiple organizations simultaneously (many network owners).

Pay as You Grow

A cloud-based Infinity Controller account is free and supports a network of up to 10 Infinity wireless access points, but can be expanded as the business grows. Learn more about the paid version here.

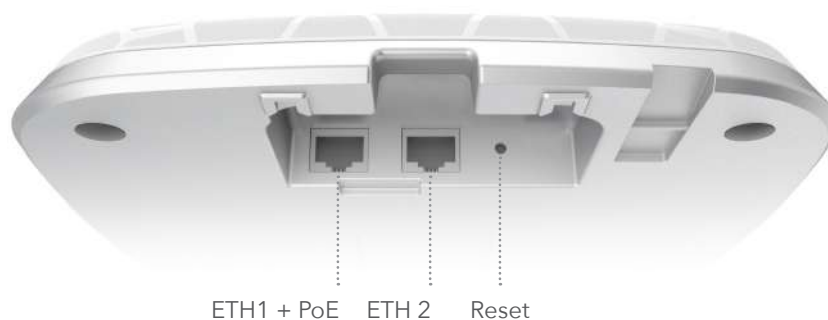## Predefined Scenarios for Your Applications

The Infinity Controller provides an array of features, collectively forming the optimal solution for multiple scenarios, e.g. a complete any-size office access point network, small café or shop hotspot, and an Easy Mesh application, which is popular among small hotels, schools, and hospitals.

IP Session Logging

Infinity access points allow users to track and log end-user credentials (source/destination IPs and ports, MAC address, etc.) on the Internet, thus allowing a safer and transparent Internet service.

Interfaces

ETH1 + PoE   ETH 2   Reset

Specifications

Wireless

WLAN Standard	IEEE 802.11a/b/g/n/ac
Radio Mode	MIMO dual 3×3
Operating Mode	Access point, repeater
Radio Frequency Band	2.402 - 2.484GHz (country dependent) FCC 2.412 - 2.462GHz (CH1-CH11)
	5.170 - 5.875GHz (country dependent) FCC 5.745 - 5.825GHz (CH149-CH161)
Transmit Power	2.4GHz: 22dBm per chain @ MCS23
	5GHz: 22dBm per chain @ MCS23
Channel Size	20, 40, 80MHz
Modulation Schemes	802.11ac: OFDM (256-QAM, 64-QAM, 16-QAM, QPSK, BPSK)
	802.11a/g/n: OFDM (64-QAM, 16-QAM, QPSK, BPSK)
	802.11b: DSS (CCK, DQPSK, DBPSK)
Data Rates	802.11ac @ 80MHz: 1300, 1170, 975, 780, 585, 390, 292.5, 195, 97.5Mbps
	802.11n @ 40MHz: 450, 405, 360, 270, 180, 135, 90, 45Mbps
	802.11a/g @ 20MHz: 54, 48, 36, 24, 18, 12, 9, 6Mbps
	802.11b @ 20MHz: 11, 5.5, 2, 1Mbps
Duplexing Scheme	Time Division Duplex
Wireless Security	WPA/WPA2 Personal, WPA/WPA2 Enterprise, WACL, Hotspot (UAM)
Roaming	Yes

Antenna

Type	6× internal omni-directional antennas
Gain	2.4GHz: 5dBi
	5GHz: 5dBi
Coverage Radius	150 meters (492ft)

Wired

Interface	2 × 10/100/1000 Base-T, RJ-45

Networking

Operating Mode	Bridge, router IPv4 and IPv6
Management IPv4	Static, dynamic
Management IPv6	Static, dynamic stateless, dynamic stateful
Secondary IPv4	Supported
VLAN	802.1Q for management and data
Virtual SSID	8 per each radio
Client Isolation	Supported

Traffic Management

Client Isolation	Supported
Wi-Fi Multimedia (WMM)	Supported
Multicast Enhancement	Supported
Concurrent Clients	254

Services

Services	SNMP server, NTP client, WNMS client

Power

Power Method	802.3af/at with passive PoE (37-56V) support
Power Supply	100-240VAC to 48VDC PoE
Max Power Consumption	19W

Management

System Monitoring	SNMP v1, syslog

Physical

Dimensions	Length 191.5mm (7.54''), width 191.5mm (7.54''), height 35.5mm (1.4'')
Weight	650g (22.9oz)
Mounting	Suspended ceiling mount and wall/ceiling mount

Environmental

Operating Temperature	–10°C (+14°F) ~ +55°C (+131°F)
Humidity	0 ~ 90 % (non-condensing)

Regulatory

Certification	FCC/IC/CE

Flexible Mounting

Wall/Ceiling

Suspended Ceiling

NFT 3ac Lite