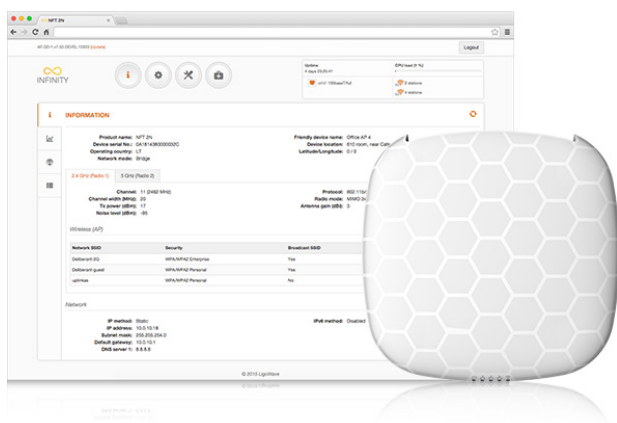# LigoWave

NFT 1N-TH/ NFT 1N AF-TH

2.4 GHz, 802.11N (2x2) indoor access point

The NFT 1N-TH/ 1N AF-TH are indoor WI-FI access points based on 802.11N technology with integrated 2.4 GHz (2x2) MiMo radios boasting an output power of 28 dBm. 3 Ethernet ports allow connecting multiple devices to the access point. The NFT 1N-TH model is powered with a 12-24V passive PoE adapter and the NFT 1N AF-TH model supports the 802.3af standard, which allows powering the device using a PoE switch.

OS

The indoor access point runs the Infinity OS - a highly functional and easy to use operating system. This powerful and flexible operating system ensures flawless operation of LigoWave hardware devices and effortless setup for those deploying the networks.

- Responsive HTML 5 based GUI
- 128 concurrent clients
- 8 virtual networks (SSID+VLAN)
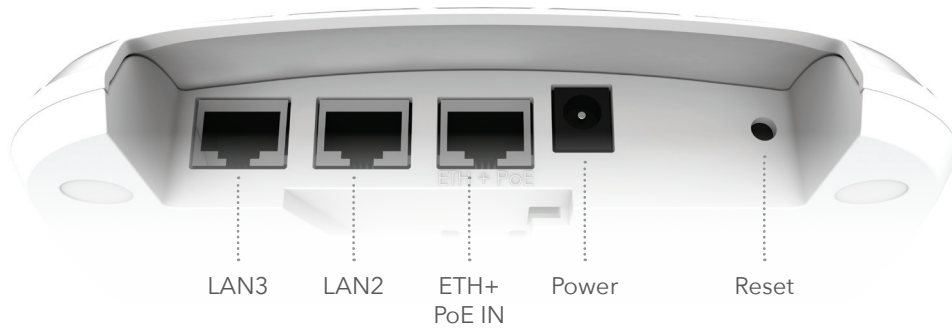- IPv6 support
- WNMS compatible

Proximity

LigoWave access points have an integrated mobile device detection feature. Any device within range can be logged with MAC address and date / time without any user interaction. The data is exported in real time and can be used to enhance the services of enterprise or managed service providers by importing it to their own application. An API is available upon request. There are several technology partners already using the functionality including Cloud4Wi and Socifi.

WNMS

WNMS is a FREE enterprise grade Wireless Network Management System. LigoWave's comprehensive network management system supports several thousand of nodes. Multiple networks may be maintained and monitored using one server. A rich feature set helps to diagnose network problems effectively, visualize networks on a map, perform scheduled firmware upgrades automatically, track states of devices, get failure alerts, and collect statistics. WNMS is available as a stand-alone version for Linux and Windows servers, as a cloud-based system and as a mobile application for Android devices.

Interfaces

LAN3   LAN2   ETH+ PoE IN   Power   Reset

Specifications

Wireless

WLAN standard	IEEE 802.11 b/g/n
Radio mode	MIMO 2x2
Operating mode	Access point, repeater
Radio frequency band	2.402 - 2.484 GHz (country dependent) FCC 2.412 - 2.462 GHz (CH1-CH11)
Transmit power	2.4 GHz: 17 dBm @ MCS0 (For Thailand)
Channel size	20, 40 MHz
Modulation schemes	802.11 g/n: OFDM (64-QAM, 16-QAM, QPSK, BPSK)
	802.11 b: DSS (CCK, DQPSK, DBPSK)
Data rates	802.11 n @ 40 MHz: 300, 270, 240, 180, 120, 90, 60, 30 Mbps
	802.11 g @ 20 MHz: 54, 48, 36, 24, 18, 12, 9, 6 Mbps
	802.11 b @ 20 MHz: 11, 5.5, 2, 1 Mbps
Duplexing scheme	Time division duplex
Wireless security	WPA/WPA2 Personal, WPA/WPA2 Enterprise, WACL, Hotspot (UAM)
Roaming	Yes

Antenna

Type	2 x internal omni-directional antennas
Gain	3 dBi
Coverage radius	100 meters (328 ft)

Wired

Interface	3 x 10/100 Base-T, RJ45

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

Services

Services	SNMP server, NTP client, WNMS client

Power

Power method	NFT 1N-TH: 12-24 VDC passive PoE; additional 12-24V DC input
	NFT 1N AF-TH: 802.3af with passive PoE (48V) support; additional 48V DC input
Power supply	NFT 1N-TH: 100 - 240 VAC to 12-24V VDC passive PoE (inlcuded)
	NFT 1N AF-TH:100 – 240 VAC to 48 VDC 802.3af PoE (not included)
Power consumption (max)	6.24 W

Management

System monitoring   SNMP v1, wyslog

Physical

Dimensions*   153 mm (6.1''), 147 mm (5.8 ''), 29 mm (1.14 '')
Weight**   188 g (6.63 oz)
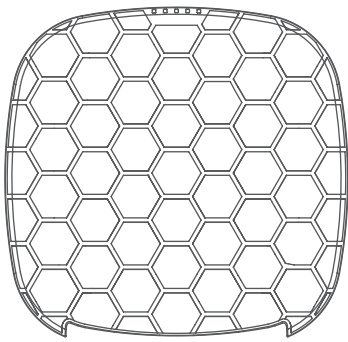Mounting   Suspended ceiling mount, wall/ceiling mount, pole mount

Environmental

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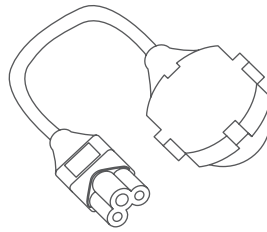Humidity   0 ~ 90 % (non-condensing)

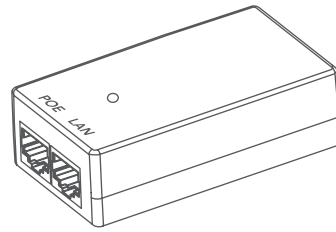## Regulatory

Certification   FCC/IC/CE

Package contains

* NFT 1N only

x1   x1*   x1*   x2

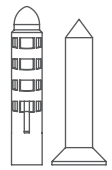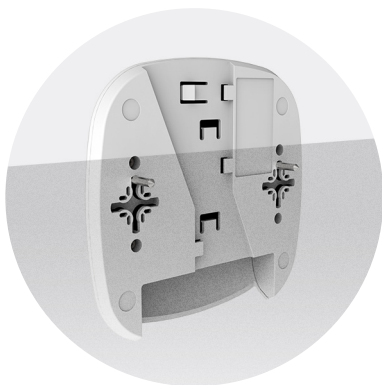## Flexible mounting

Wall/ceiling   Pole   Suspended ceiling

NFT 1N-TH/ NFT 1N AF-TH