# LigoWave

# NFT 2 ac sector

Dual-band, dual-radio 802.11ac outdoor access point

The NFT 2ac sector is a dual band WIFI access points based on 802.11ac and b/g/n technology with integrated 2.4 and 5 GHz (2x2) MiMo radios boasting an output power of 29 dBm. The gigabit Ethernet port with 802.3af/at support allows powering the device with PoE switches. The integrated sector antennas can work under highly interfered environment, covering 300Meter distance (CPE dependent). The IP-67 standards rated enclosure, integrated surge protection and professional mounting bracket help ensure continuous operation in the harshest of weather conditions.

## OS

The outdoor 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
- 256 concurrent clients
- 16 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.
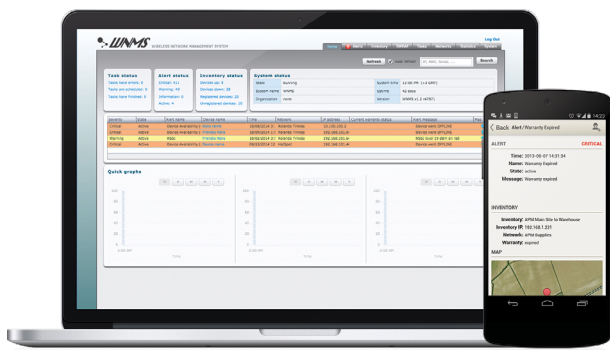
## WNMS

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.

# Specifications

## Wireless

| | |
|---|---|
| WLAN standard | IEEE 802.11 a/b/g/n/ac |
| Radio mode | MIMO dual 2x2 |
| Operating mode | Access point, repeater |
| Radio frequency band | 2.402 - 2.484 GHz (country dependent)  FCC 2.412 - 2.462 GHz (CH1-CH11) |
| | 5.170 - 5.875 GHz (country dependent)  FCC 5.745 - 5.825 GHz (CH149-CH161) |
| Transmit power | 2.4 GHz: 29 dBm @ MCS0 |
| | 5 GHz: 29 dBm @ MCS0 |
| Channel size | 20, 40, 80 MHz |
| Modulation schemes | 802.11 ac: OFDM (256-QAM, 64-QAM, 16-QAM, QPSK, BPSK) |
| | 802.11 a/g/n: OFDM (64-QAM, 16-QAM, QPSK, BPSK) |
| | 802.11 b: DSS (CCK, DQPSK, DBPSK) |
| Data rates | 802.11 ac @ 80 MHz: 866, 780, 650, 585, 520, 390, 260, 195, 130, 65 Mbps |
| | 802.11 n @ 40 MHz: 300, 270, 240, 180, 120, 90, 60, 30 Mbps |
| | 802.11 a/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) |

## Antenna

| | |
|---|---|
| Type | Integrated dual-polarized 90 degree sector antenna |
| Gain | 2.4GHz@16dBi,5.8GHz@19dBi |

## Wired

| | |
|---|---|
| Interface | 1 x 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 |

## Services

| | |
|---|---|
| Services | SNMP server, NTP client, WNMS client |

## Power

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|---|---|
| Power method | 802.3 af/at with passive PoE (37 - 56V) support |
| Power supply | 100 – 240 VAC to 48 VDC PoE (included) |
| Power consumption (max) | 19 W |

## Management

| | |
|---|---|
| System monitoring | SNMP v1, syslog |

## Physical

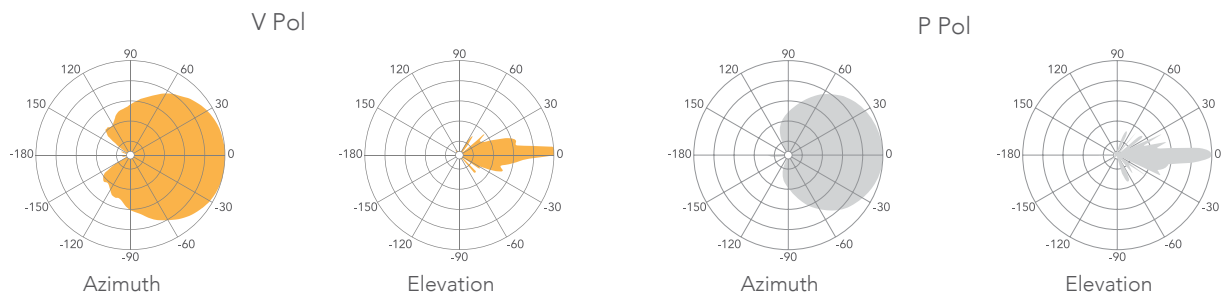| | |
|---|---|
| Dimensions | Width 399 mm (15.7 "), height 174 mm (6.8 "), depth 47 mm (1.8 ") |
| Weight | 2.9 kg (6.3 lb) (mount included) |
| Mounting | Articulating wall/pole mounting bracket |

## Environmental

| | |
|---|---|
| Operating temperature | -40°C (-40 F) ~ +65°C (+149 F) |
| Humidity | 0 ~ 90 % (non-condensing) |

## Regulatory

| | |
|---|---|
| Certification | FCC/IC/CE |

Antenna specifications

V Pol

Azimuth          Elevation

P Pol

Azimuth          Elevation

| Model | NFT 2ac sector |
|---|---|
| Frequency range | 2.4~2.483/5.1 - 5.9 GHz |
| Gain | 16dBi/19dBi |
| Polarization | Dual linear |
| Cross-pol Isolation | 24 dBi |
| VSWR | <1.8 |
| Azimuth beamwidth(H pol) | 90 ° |
| Azimuth beamwidth(V pol) | 90 ° |
| Elevation beamwidth | 20 ° |