

Nile Zero Trust Fabric

NWA 1050 Outdoor AP



Overview

The Nile NWA 1050 is an outdoor Wi-Fi 6 (802.11ax) access point engineered for reliable, high-performance connectivity in exterior environments such as courtyards, stadiums, walkways, and open campus spaces. It features dual-band 4×4 MIMO radios for 2.4 GHz and 5 GHz operation, along with a dedicated dual-band sensor radio that continuously validates coverage, capacity, and availability.

Designed with a ruggedized, weather-rated enclosure, the NWA 1050 supports consistent performance in demanding outdoor conditions.

As part of Nile's Zero Trust Fabric, the NWA 1050 runs in a secure, cloud-delivered network-as-a-service (NaaS) architecture with centrally enforced segmentation and autonomous operations for continuous assurance and optimization. QR-code activation through the Nile Nav app enables fast, error-free installation with guided workflows.

Features

Dual-Band 4×4:4 MU-MIMO

Enables simultaneous multi-client throughput with higher capacity and efficiency

Target Wake Time (TWT)

Ideal for low-traffic IoT devices, TWT schedules when clients communicate with the AP—reducing power use and minimizing airtime contention

Transmit Beamforming (TxBF)

Increased signal reliability and range

Dynamic Frequency Selection (DFS)

Optimized use of available RF spectrum

Seamless Device Roaming

Standards that aid in better Wi-Fi device roaming such as 802.11k, 802.11r, 802.11v.

Automatic Channel Planning

Radios automatically optimize channel and power settings for peak performance, with built-in coverage hole detection and mitigation.

Optimized Connection and QoS

Steers dual-band devices to the optimal band and moves low-RSSI clients to stronger APs for a better connection.

Zero Trust Security

• WPA3 & Enhanced Open Security

Stronger encryption and authentication for protected networks, with automatic session encryption on open networks to safeguard user data and passwords.

• Secure Management

Secure connectivity is enforced by a tamper-proof design, allowing management exclusively through the Nile Services Cloud.

Specifications

Hardware Model

NWA1050 - Outdoor Internal Antenna Model

Wi-Fi Radio Specifications

Outdoor, Tri-radio
5GHz radio, 802.11ax 4×4 MIMO
2.4GHz 802.11ax 4×4 MIMO
Dual-band capable 3rd radio, 802.11ac

Primary WLAN Radios

5GHz Radio	4×4 SU-MIMO Capable; DL-MU-MIMO, UL-MU-MIMO, DL-OFDMA, UL-OFDMA capable
2.4GHz Radio	4×4 SU-MIMO Capable; DL-MU-MIMO, UL-MU-MIMO, DL-OFDMA, UL-OFDMA capable
Supported Frequency Bands, Channels, DFS (country specific restrictions apply)	2.400 - 2.4835GHz (ISM) 5.150-5.250GHz (U-NII-1) 5.250-5.350GHz (U-NII-2A) 5.470-5.725GHz (U-NII-2C / U-NII-2E) 5.725-5.850GHz (U-NII-3) Channel availability depends on configured country (based on regulatory domain Dynamic Frequency Selection (DFS) optimized use of available RF Spectrum)
Transmit power	2.4GHz radio – Max 24dBm (25dBm EIRP), Min 0dBm 5GHz radio – Max 27dBm (27dBm EIRP), Min 0dBm

Third Radio (Monitoring/Sensor)

	Dual Band capable, 802.11ac, 1×1 radio; Operating Band: Dual band – 2.400-2.4835GHz, 5.150-5.250GHz, 5.250-5.350GHz, 5.470- 5.725GHz, 5.725-5.850GHz
Transmit power	5GHz – Max 22dBm (EIRP); 2.4GHz – 20dBm (EIRP)
Antenna	Omni-directional internal antenna

Ethernet

Interface	1× 1/2.5/5GbE RJ45 port, with line rate MACSec Support +/-6kV surge protection using GDT/Varistor
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Power Sources, Power Consumption

	Direct DC power or Power over Ethernet: 802.3bt, 802.3at Power budget – 35W at full load
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Mechanical Specifications, Enclosure, LEDs, BT/BLT

	Shock and Vibration resistant Earth Lug for surge arrest grounding GORE TEX vent hole Dimensions: 10.2" x 10.2" x 2.95" (260mm x 260mm x 75mm)
Mounting	Outdoor pole mount & Wall mount capable, horizontal and inclined surface mounting with Universal mount kit (tilt/rotate)
QR Code	QR Code identifier on the enclosure
LED	Single LED with 3 colors: Red, Yellow, Green
Bluetooth	Supported for hardware installation and activation

Environment/Operation Conditions

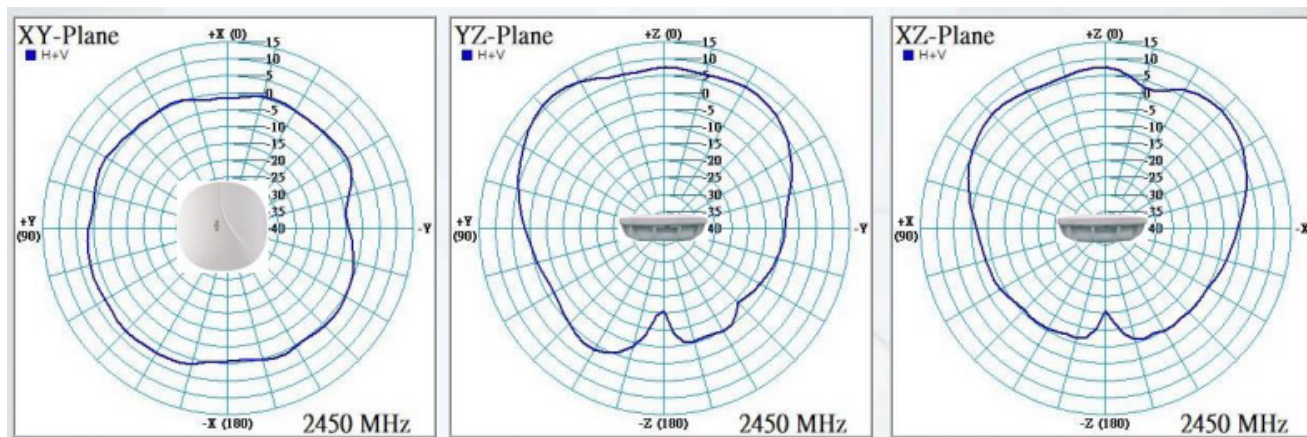
IP Rating	IP67
Operating Temperature	-40°C to +65°C
Operating Humidity	5 to 90% Relative Humidity, non-condensing ETS 300 019 class 3.3 Environments
Storage and Transportation Conditions	-40C to +70C; Humidity 5% to 93% non-condensing ETS 300 019 class 2.3 environments
MTBF	495,059 hrs at 77°F (25°C)

Regulatory Compliance

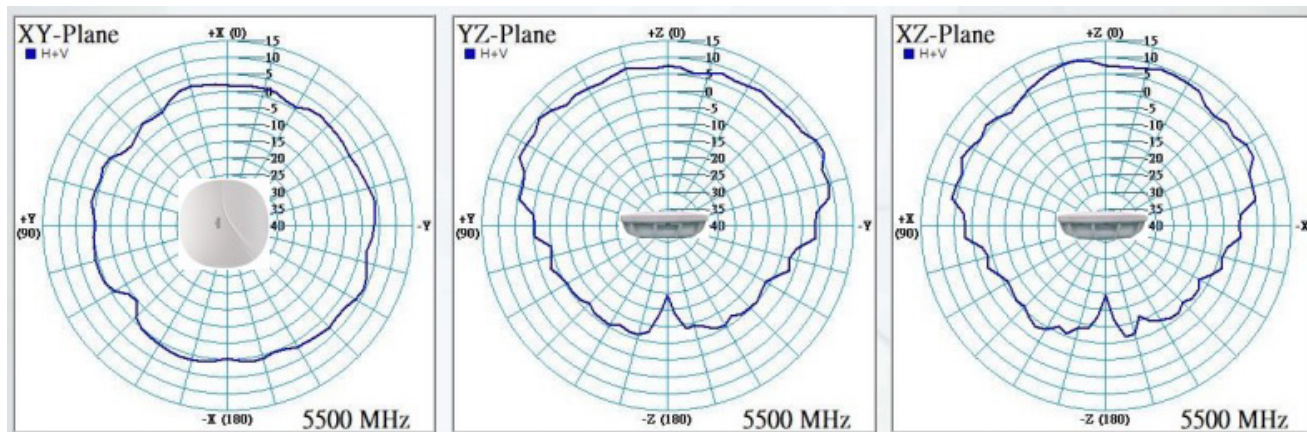
	Meets required Regulatory Compliance standards applicable to similar products: FCC/IC/CE UL/IEC/EN 60950 Bluetooth SIG Wi-Fi Alliance Certified
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Signal Coverage Patterns

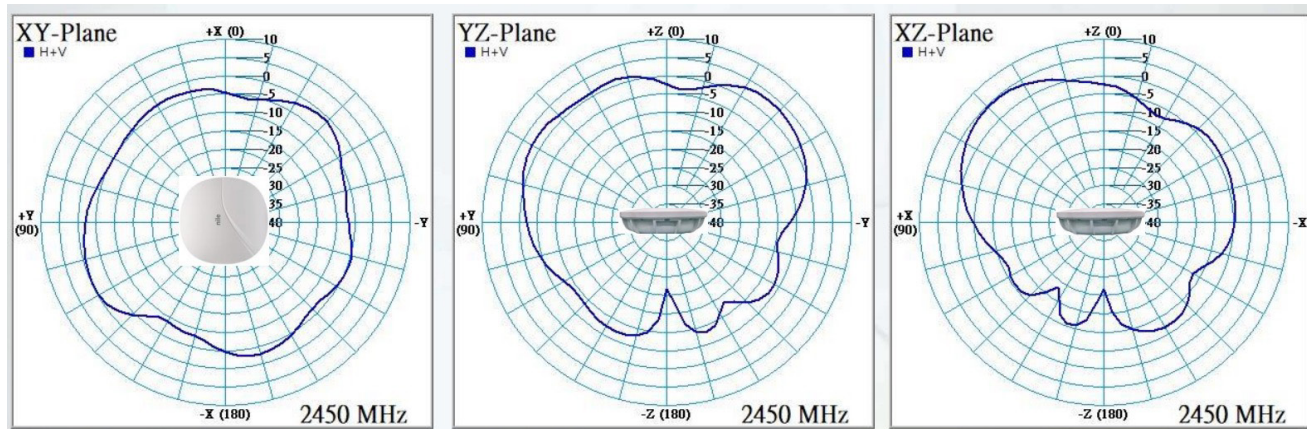
NWA 1050 – Client Serving - Normalized Radiation Pattern (2.4 GHz)



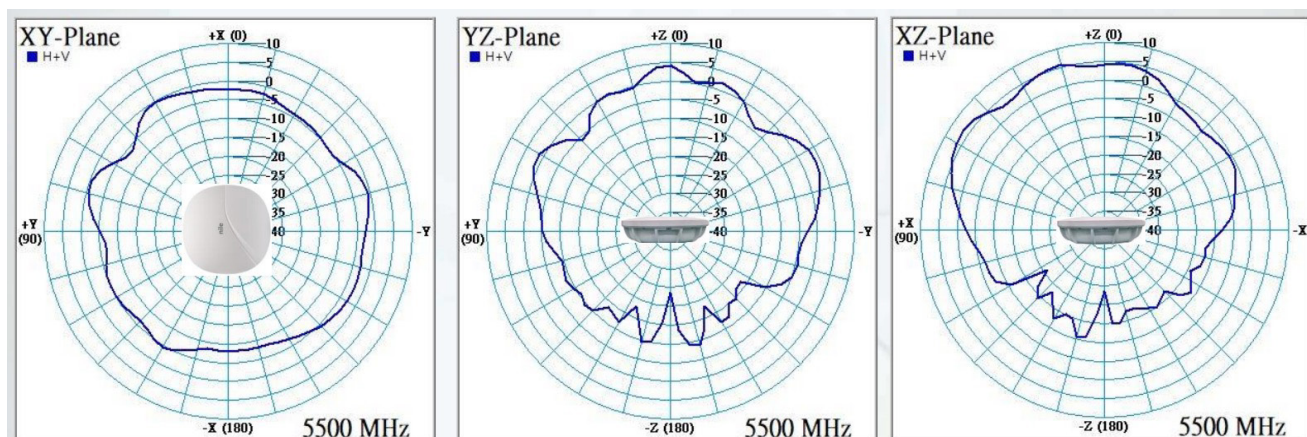
NWA 1050 – Client Serving - Normalized Radiation Pattern (5 GHz)



NWA 1050 – Scanning Radio - Normalized Radiation Pattern (2.4 GHz)



NWA 1050 – Scanning Radio - Normalized Radiation Pattern (5 GHz)



Warranty & Support

All Nile access points include 24x7 AI-driven cloud monitoring and lifecycle automation delivered through the Nile autonomous AI Command Center. Performance-based service options include a financially backed Performance Guarantee with service credits. Hardware replacement options include expedited RMAs aligned to the selected tier and region.

Ready to Get Started?

Request a Demo