Equipped with Qualcomm’s latest chipset, the Neutron Series AX indoor access points feature AX technology, which deepens and expands the capabilities of Wi-Fi as well as fortifies SMB networks. The new 802.11ax technology builds upon real-world deployment of 11ac. As next-generation Wi-Fi, 11ax is no longer just about speeds but also about stronger, steadier, and more efficient wireless connections.

**Features & Benefits**
- High-capacity & high-efficient Wi-Fi (Wi-Fi 6)
- Uplink & downlink of OFDMA for more efficient channel use
- 1024 QAM for 25% increase in throughput
- Target Wake Time (TWT) for power-saving wake times
- BSS Coloring for tagging packets with “color” to differentiate data
- Spatial reuse for simultaneous transmissions on same channel
- Uplink & downlink of MU-MIMO for optimal signal & reception reliability
- Operate as a stand-alone AP or centrally manage via switch
- Remotely manage 1-1,000+ APs via ezMaster
- GigE PoE-compliant ports expand deployment & power options
- Low-profile designs for ceiling or wall mount
Next-Generation Wi-Fi

The Neutron Series AX Access Points take advantage of 11ax technology, which enables more efficient channel use, reduces latency between AP and client devices, and provides ground-breaking features, such as uplink and downlink of OFDMA, Target Wake Time, uplink and downlink of MU-MIMO, BSS Coloring, spatial reuse, and preamble updates.

- OFDMA (in both uplink and downlink): enables more efficient channel use, reduces latency between AP and client devices, and provides backward-compatibility with 2.4 GHz and 5 GHz
- 1024 QAM: boosts throughput by 25% and provides greater reliability in short distances
- BSS coloring: tags packets with a “color” to differentiate between adjacent basic service sets to potentially help minimize co-channel interference (CCI)
- Spatial reuse: identifies the different “colors” via BSS coloring and simultaneously transmits on the same channel, which reduces waiting time and lessens contention; determines whether the transmission will be deferred or reused on the channel
- Uplink & downlink of MU-MIMO: supports up to eight client devices and provides greater network efficiency, focuses radio energy on specific users, and ensures optimal signal and reception reliability
- Target Wake Time (TWT): reduces power consumption, schedules wake times, and extends client battery life of mobile and IoT devices
- Longer OFDM symbols: enables shorter wait times between data transmissions and tolerates more noise, which allows greater coverage

Flexibility in Deployment

Neutron’s new 11ax line of high-performance, managed, indoor ceiling- and wall-mount access points consists of 2x2 11ax dual-band for general use and a 4x4 dual-band 11ax version for high-capacity use that are ready to immediately deploy. Configure APs individually as stand-alone units, locally manage up to 50 per Neutron switch or use ezMaster software to control 1,000+ APs.

The Latest in Wi-Fi Security

With the Neutron 11ax (WiFi 6) access points, your network is protected by WPA3, which delivers next-generation wireless security by making connecting client and IoT devices more secure and easier, as well as WPA2-AES. The high level of security expected and demanded by enterprises now protects SMBs as well.

Secure Guest Networks

Organizations that offer internet access to patrons or visitors—notably hotels, retail shops and restaurants—will appreciate Neutron’s guest network capabilities. Establish a secure guest network that blocks access to main corporate computers. Create separate Virtual LANs for increased security, network reliability, and bandwidth conservation.

Power-over-Ethernet Convenience

All Neutron 11ax access points support 1 and 2.5 Gigabit PoE ports, enabling placement in discreet locations where power outlets are scarce or unavailable. Power the access points through a connected Ethernet cable directly to a Neutron Managed Gigabit PoE+ switch or with a PoE adapter up to 328 feet from the power source.

Simplified Deployment & Provisioning

In combination with Neutron Switches and ezMaster Network Management Software, Neutron 11ax APs are automatically discovered and provisioned. One-click individual or bulk configurations and upgrades save time. In addition, these access points are quickly and easily deployed and operated by users with limited networking experience.

Manage Up to 50 APs with Neutron Switches

In small settings, any Neutron Managed Switch can act as a wireless controller capable of managing up to 50 Neutron EWS Access Points. IT administrators have access to all connected Neutron devices and a full array of Layer 2 management tools. Choose between 8-, 24-, and 48-Port PoE+ switch models with flexible deployment and management options.
**Technical Specifications**

**Standards**
- EWS377AP/EWS357AP
  - IEEE 802.11ax on 2.4 GHz
  - IEEE 802.11ax on 5 GHz
- Backward compatible with 802.11b/g/n/ac

**Processor**
- EWS377AP
  - Qualcomm® Quad-Core CPU ARM Cortex A53s @ 2.0GHz
- EWS357AP
  - Qualcomm® Quad-Core CPU ARM Cortex A53s @ 1.0GHz

**Antenna**
- EWS377AP
  - 4 x 2.4 GHz: 3 dBi
  - 4 x 5 GHz: 3 dBi
  - Integrated Omni-Directional Antenna
- EWS357AP
  - 2 x 2.4 GHz: 3 dBi
  - 2 x 5 GHz: 3 dBi
  - Integrated Omni-Directional Antenna

**Physical Interface**
- EWS377AP
  - 1 x 10/100/1000/2500 NBASE-T, RJ-45 Gigabit Ethernet Port
  - 1x DC Jack
  - 1 x Reset Button
- EWS357AP
  - 1 x Power
  - 1 x LAN
  - 1 x 2.4 GHz
  - 1 x 5 GHz

**LED Indicators**
- EWS377AP
  - 1 x Power
  - 1 x LAN
  - 1 x 2.4 GHz
  - 1 x 5 GHz
- EWS357AP
  - 1 x Power
  - 1 x LAN
  - 1 x 2.4 GHz
  - 1 x 5 GHz

**Power Source**
- EWS377AP
  - Power-over-Ethernet: 802.3at Input
  - 12VDC /2A Power Adapter
- EWS357AP
  - Power-over-Ethernet: 802.3af Input
  - 12VDC /1.25A Power Adapter

**Maximum Power Consumption**
- EWS377AP
  - 19.5W
- EWS357AP
  - 12.5W

**Wireless & Radio Specifications**

**Operating Frequency**
- EWS377AP/EWS357AP
  - Dual-Radio Concurrent 2.4 GHz & 5 GHz

**Operation Modes**
- EWS377AP/ EWS357AP
  - Managed mode: AP
  - Stand alone: AP

**Frequency Radio**
- EWS377AP/EWS357AP
  - 2.4 GHz: 2400 MHz ~ 2835 MHz
  - 5 GHz: 5150 MHz ~ 5250 MHz, 5250 MHz ~ 5350 MHz, 5470 MHz ~ 5725 MHz, 5725 MHz ~ 5850 MHz

**Transmit Power**
- EWS377AP
  - Up to 23 dBm on 2.4 GHz
  - Up to 23 dBm on 5 GHz
**Technical Specifications continued**

**Transmit Power**
- **EWS377AP**
  - Up to 20 dBm on 2.4 GHz
  - Up to 20 dBm on 5 GHz

**Tx Beamforming (TxBF)**
- **EWS377AP**
  - 4x4
- **EWS375AP**
  - 2x2

**Radio Chains/Spatial Stream**
- **EWS377AP/EWS357AP**
  - **EWS357AP**
    - Transmit Power

**SU-MIMO**
- **EWS377AP**
  - Four (4) spatial stream SU-MIMO for 2.4GHz and four (4) spatial stream SU-MIMO for 5GHz up to 3.548 Mbps wireless data rate to a single wireless client device under the both 2.4GHz and 5GHz radio.

**EWS375AP**
- Two (2) spatial streams SU-MIMO for 2.4GHz and two (2) spatial streams SU-MIMO for 5GHz up to 1.774Mbps wireless data rate to a single 11ax wireless client device under the both 2.4GHz and 5GHz radio.

**MU-MIMO**
- **EWS377AP**
  - Four (4) spatial streams Multiple (MU)-MIMO for up to 2400 Mbps wireless data rate to transmit to two (2) two streams MU-MIMO 11ax capable wireless client devices under 5GHz simultaneously.
  - Four (4) Multiple (MU)-MIMO for up to 1148 Mbps wireless data rate to transmit to two (2) two streams MU-MIMO 11AX capable wireless client devices under 2.4GHz simultaneously.

**EWS375AP**
- Two (2) spatial streams Multiple (MU)-MIMO for up to 1200 Mbps wireless data rate to transmit to one (1) two streams MU-MIMO 11ax capable wireless client devices under 5GHz simultaneously.
  - Two (2) Multiple (MU)-MIMO for up to 574 Mbps wireless data rate to transmit to one (1) two streams MU-MIMO 11ax capable wireless client devices under 2.4GHz simultaneously.

**Supported Data Rates (Mbps)**
- **EWS377AP**
  - 802.11ax:
    - 2.4 GHz: 9 to 1148 (MCS0 to MCS11, NSS = 1 to 4)
    - 5 GHz: 18 to 2400 (MCS0 to MCS11, NSS = 1 to 4)
  - 802.11b:
    - 1, 2, 5.5, 11
  - 802.11a/g:
    - 6, 9, 12, 18, 36, 48, 54
  - 802.11ac/g/n:
    - 6.5 to 1733 Mbps (MCS0 to MCS9, NSS = 1 to 4)

- **EWS357AP**
  - 802.11ax:
    - 2.4 GHz: 9 to 287 (MCS0 to MCS11, NSS = 1 to 2)
    - 5 GHz: 18 to 1200 (MCS0 to MCS11, NSS = 1 to 2)
  - 802.11b:
    - 1, 2, 5.5, 11
  - 802.11a/g:
    - 6, 9, 12, 18, 36, 48, 54
  - 802.11ac/g/n:
    - 6.5 to 867 Mbps (MCS0 to MCS9, NSS = 1 to 2)

**Supported Radio Technologies**
- **EWS377AP**
  - 802.11ax: Orthogonal Frequency Division Multiple Access (OFDMA)
  - 802.11b: Direct-sequence spread-spectrum (DSSS)
  - 802.11ac/g/n: Orthogonal Frequency Division Multiple (OFDM)

**Channelization**
- **EWS377AP**
  - 802.11ax supports high efficiency (HE) – HE20/HE40/HE80 MHz
  - 802.11ac supports very high throughput (VHT) – VHT 20/40/80 MHz
  - 802.11n supports high throughput (HT) – HT 20/40 MHz
  - 802.11n supports very high throughput under the 2.4GHz radio – VHT40 MHz (256-QAM)

**Supported Modulation**
- **EWS377AP**
  - 2.11ax: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM, 1024-QAM
  - 802.11ac:
    - BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM, 1024-QAM
  - 802.11a/g/n:
    - BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM

**Management Multiple BSSID**
- **EWS377AP**
  - 8 SSIDs for both 2.4GHz and 5GHz radios

**VLAN Tagging**
- **EWS377AP**
  - Supports 802.1q VLAN tagging

**Spanning Tree**
- **EWS377AP**
  - Supports 802.1d Spanning Tree Protocol

**QoS (Quality of Service)**
- **EWS377AP**
  - Support with IEEE 802.11e Standard

**SNMP**
- **EWS377AP**
  - V1, V2c, V3

**MIB**
- **EWS377AP**
  - I/L, Private MIB

**Management Features Deployment Options**
- **EWS377AP**
  - Stand-Alone (Individually Managed)
  - Managed Mode
    - (with Neutron Series Switch/ezMaster)

**Stand-Alone Management Features**
- **EWS377AP**
  - Auto Channel Selection
  - Auto Transmit Power
  - Wireless STA (Client)
  - Connected List Auto Channel Selection
  - Captive Portal Per SSID
  - Fast Roaming (802.11k & 802.11r)
  - Pre-Authentication (802.11i, 802.11x)
  - PMK Caching (802.11i)
  - Band Steering per SSID
  - Traffic Shaping per SSID/per user
  - VLAN Per SSID
  - Backup/Restore Settings
  - Auto Reboot
  - E-Mail Alert
  - Site Survey
  - Save Configuration as Users' Default

**Wireless Management Features**
- **EWS377AP**
  - (With ezMaster & Neutron Switch)

**Supported Radio Technologies**
- **EWS377AP**
  - 802.11ax: Orthogonal Frequency Division Multiple Access (OFDMA)
  - 802.11b: Direct-sequence spread-spectrum (DSSS)
  - 802.11ac/g/n: Orthogonal Frequency Division Multiple (OFDM)

**Channelization**
- **EWS377AP**
  - 802.11ax supports high efficiency (HE) – HE20/HE40/HE80 MHz
  - 802.11ac supports very high throughput (VHT) – VHT 20/40/80 MHz
  - 802.11n supports high throughput (HT) – HT 20/40 MHz
  - 802.11n supports very high throughput under the 2.4GHz radio – VHT40 MHz (256-QAM)

**Supported Modulation**
- **EWS377AP**
  - 2.11ax: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM, 1024-QAM
  - 802.11ac:
    - BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM, 1024-QAM
  - 802.11a/g/n:
    - BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM
  - 802.11b:
    - BPSK, QPSK, CCK

**Management Multiple BSSID**
- **EWS377AP**
  - 8 SSIDs for both 2.4GHz and 5GHz radios

**VLAN Tagging**
- **EWS377AP**
  - Supports 802.1q VLAN-to-VLAN Tagging

**Spanning Tree**
- **EWS377AP**
  - Supports 802.1d Spanning Tree Protocol

**QoS (Quality of Service)**
- **EWS377AP**
  - Support with IEEE 802.11e Standard

**SNMP**
- **EWS377AP**
  - V1, V2c, V3

**MIB**
- **EWS377AP**
  - I/L, Private MIB

**Management Features Deployment Options**
- **EWS377AP**
  - Stand-Alone (Individually Managed)
  - Managed Mode
    - (with Neutron Series Switch/ezMaster)
Technical Specifications continued

Wireless Security

EWS377AP/EWS357AP
WPA3
WPA2 Enterprise (AES)
Hide SSID in Beacons
MAC Address Filtering, Up to 32 MACs per SSID
Wireless STA (Client) Connected List
SSH Tunnel
Client Isolation

Environment & Physical Temperature Range

EWS377AP/EWS357AP
Operating: 32ºF~104ºF (0 ºC~40 ºC)
Storage: -22 ºF~176 ºF (-30 ºC~80 ºC)

Humidity (non-condensing)

EWS377AP/EWS357AP
Operating: 90% or less
Storage: 90% or less

Dimensions & Weights EWS377AP Device

EWS377AP
Weight: 1.234 lbs (0.560kg)
Length: 8.07" (205 mm)
Width: 8.07" (205 mm)
Height: 1.31" (33.2 mm)

EWS357AP
Weight: 0.947 lbs (0.43kg)
Length: 6.30" (160 mm)
Width: 6.30" (160 mm)
Height: 1.31" (33.2 mm)

Master Carton

EWS377AP
Weight: 1.9 lbs (0.866kg)
Length: 9.65" (245 mm)
Width: 9.65" (245 mm)
Height: 3.35" (85 mm)

EWS357AP
Weight: 1.28 lbs (0.58Kg)
Length: 8.07" (205 mm)
Width: 8.07" (205 mm)
Height: 3.27" (83 mm)

Packaging

EWS377AP
Weight: 1.9 lbs (0.866kg)
Length: 9.65" (245 mm)
Width: 9.65" (245 mm)
Height: 3.35" (85 mm)

EWS357AP
Weight: 0.947 lbs (0.43kg)
Length: 6.30" (160 mm)
Width: 6.30" (160 mm)
Height: 1.31" (33.2 mm)

Package Contents

1-EWS377AP Dual-Band AX3600 Indoor Access Point
1-EWS357AP Dual-Band AX1800 Indoor Access Point
1 – Ceiling Mount Base (9/16" Trail)
1 – Ceiling Mount Base (15/16" Trail)
1 – Ceiling and Wall Mount Screw Kits
1 – Quick Installation Guide

Certifications

EWS377AP/EWS357AP
FCC, CE

Warranty:

EWS377AP/EWS357AP
1 Year

Maximum data rates are based on IEEE 802.11 standards. Actual throughput and range may vary depending on distance between devices or traffic and bandwidth load in the network. Features and specifications subject to change without notice. Trademarks and registered trademarks are the property of their respective owners. For United States of America: Copyright ©2018 EnGenius Technologies, Inc. All rights reserved.