**Technical Specifications**

Standards

IEEE 802.11ax on 2.4 GHz  
IEEE 802.11ax on 5 GHz

vBackward compatible with 802.11b/g/n/ac

Processor

Qualcomm® Quad-Core CPU ARM Cortex A53s @ 1.0GHz

Antenna

2×2, Integrated Omni-directional antennas (3 dBi gain @ 2.4 GHz, 3 dBi gain @ 5 GHz)

Physical Interface

1 x 10/100/1000 BASE-T, RJ-45 Gigabit Ethernet Port  
1x DC Jack  
1 x Reset Button

LED Indicators

1 x Power  
1 x LAN  
1 x 2.4 GHz  
1 x 5 GHz

Power Sourcev Power-over-Ethernet: 802.3af Input

12VDC /1.5A Power Adapter

Maximum Power Consumption

12.8W

**Wireless & Radio Specifications**

Operating Frequency

Dual-Radio Concurrent 2.4 GHz & 5 GHz

Operation Modes

Managed mode: AP, Mesh  
Stand alone: AP, Mesh,  
Frequency Radio 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 Up to 20 dBm on 2.4 GHz

Up to 15 dBm on 2.4 GHz  
Up to 15 dBm on 5 GHz

Tx Beamforming (TxBF)

Radio Chains/Spatial Stream 2×2

SU-MIMO

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 2.4G Hz and 5GHz radio.

MU-MIMO

Two (2) spatial streams Multiple (MU)-MIMO for up to 1,200 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):

802.11b: 1, 2, 5.5, 11  
802.11a/g: 6, 9, 12, 18, 36, 48, 54  
802.11n: 6.5 to 300 Mbps (MCS0 to MCS15)  
802.11ac: 6.5 to 867 Mbps (MCS0 to MCS9, NSS = 1 to 2)  
802.11ax:  
2.4 GHz: 9 to 574 (MCS0 to MCS11, NSS = 1 to 2)  
5 GHz: 18 to 1,200 (MCS0 to MSC11, NSS = 1 to 2)

Supported Radio Technologies

802.11ax: Orthogonal Frequency Division Multiple Access(OFDMA)  
802.11b: Direct-sequence spread-spectrum (DSSS)  
802.11ac/a/g/n: Orthogonal Frequency Division Multiple (OFDM)

Channelization

802.11ax supports very high throughput (VHT) —VHT 20/40/80 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)  
802.11n/ac/ax packet aggregation: A-MPDU, A-SPDU

Supported Modulation

802.11ax: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM, 1024-QAM  
802.11ac: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM  
802.11a/g/n: BPSK, QPSK, 16-QAM, 64-QAM  
802.11b: BPSK, QPSK, CCK

**Management Features**

Multiple BSSID

support 8 SSIDs on both 2.4GHz and 5GHz

VLAN Tagging

Supports 802.1q SSID-to-VLAN Tagging  
Cross-Band VLAN Pass-Through  
Management VLAN

Spanning Tree

Supports 802.1d Spanning Tree Protocol

QoS (Quality of Service)

Complaint With IEEE 802.11e Standard  
WMM

SNMP

v1, v2c, v3

MIB

I/II, Private MIB  
  
Wireless Security

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

**Environmental & Physical**

Temperature Range

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

Humidity (non-condensing)

Operating: 90% or less  
Storage: 90% or less

**Dimensions & Weight**

ECW220 Device

Weight: 380g  
Length: 6.30″ (160 mm)  
Width: 6.30″ (160 mm)  
Height: 1.31″ (33.2 mm)

Packaging

Weight: TBD  
Length: 8.07″ (205 mm)  
Width: 8.07″ (205 mm)  
Height: 3.27″ (83 mm)

Package Contents

1 – ECW220 Cloud Managed Indoor Access Point  
1 – Ceiling Mount Base (9/16” T-Rail)  
1 – Ceiling Mount Base (15/16” T-Rail)  
1 – Mounting Kit  
1 – Quick Installation Guide

Certifications

FCC  
CE