**ENH500-AX**

## Station6 2x2 Patch

# EnGenius Station Wi-Fi 6 2x2 5GHz Outdoor Long Range CPE

## Overview

The EnGenius Station Wi-Fi 6 2x2 5GHz Outdoor Long Range CPE offers reliable and efficient outdoor Wi-Fi connectivity with Wi-Fi 6 technology and beamforming optimization. It features high 26 dBm transmit power and high gain 16 dBi integrated directional antenna for extended Wi-Fi range up to 5 miles point-to-point. It's also weatherproof and offers flexible operation modes with easy installation over 100 meters.

## Features & Benefits

- Wi-Fi 6 technology for high-performance and efficiency Wi-Fi in outdoor environments
- Beamforming optimizes antenna signal, reception & reliability for clients
- 2x2 directional antennas to support up to 1200 Mbps in 5-GHz
- High 26 dBm transmit power extends Wi-Fi to yard or building-to-building
- High gain 16 dBi Integrated directional antenna extend wireless networks up to 5 miles point-to-point
- IP55-rated weatherproof & dustproof housing
- Flexible Operation Modes: Access Point, Station, WDS Access Point, WDS Station, Repeater
- Gigabit Ethernet PoE port supports flexible power options

# Technical Specifications

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**Standards**

802.11a/n/ac/ax

**Antenna - 5GHz**

16dBi

**Physical Interfaces**

1 x 10/100/1000 BASE-T(Proprietary PoE)

1 x 10/100/1000 BASE-T

Proceed reset and reboot when pushing this button

**LED indicators**

1 x Power

1 x LAN

1 x WLAN

3 x Signal

**Power Source**

Proprietary 54V (EPA5006GR)

**Maximum Power Consumption**

PoE: Max. 13W

## Wireless & Radio Specifications

**Operating Frequency**

Single band 5 GHz

**Operation Modes**

AP/STA/WDS AP/WDS STA/Repeater

**Frequency Radio**

5 GHz: 5150 MHz ~ 5250 MHz, 5250 MHz ~ 5350 MHz, 5470 MHz ~ 5725 MHz, 5725 MHz ~ 5850 MHz

**Transmit Power**

26 dBm

**Radio Chains**

2 × 2:2

**SU-MIMO**

Two (2) spatial stream Single User (SU) MIMO for up to 1,200 Mbps wireless data rate with VHT80 to a 2x2 wireless device under the 5GHz radio.

**MU-MIMO**

Two (2) spatial streams Multiple (MU)-MIMO up to 1,200 Mbps wireless data rate for transmitting to two (2) streams MU-MIMO 11ax capable wireless client devices under 5GHz simultaneously.

**Supported Data Rates**

802.11ax: 5 GHz: 18 to 1200 (MCS0 to MSC11, NSS = 1 to 2)

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)

**Supported Radio Technology**

802.11ax: Orthogonal Frequency Division Multiple Access(OFDMA)

802.11a/g/n/ac: Orthogonal Frequency Division Multiple (OFDM)

802.11b: Direct-sequence spread-spectrum (DSSS)

**Channelization**

802.11ax supports high efficiency throughput (HE) —HE 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 high throughput under the 2.4GHz radio –HT40 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

**Max Concurrent User**

127 per radio

## Environmental & Physical

**Operating Temperature**

-4°~140°F/-20°C~60°C

**Storage Temperature**

-40F°~176°F/-40°C~80°C

**Storage Humidity**

Storage: 90% or less

**IP Rating(Outdoor only)**

IP55

**Surge Protection (Outdoor only)**

1KV

**ESD Protection(Outdoor only)**

Contact: 4KV Air: 8 K

## Dimensions & Weight

**Weight**

610g

**Dimensions**

260 x 84 x 55 mm

**Package Contents**

1 – ENH500-AX Outdoor CPE

1 – EPA5006GR with AC cord

2 – Pole-Mounting Brackets

1 – Wall-Mount Screw Set

1 – Quick Installation Guide

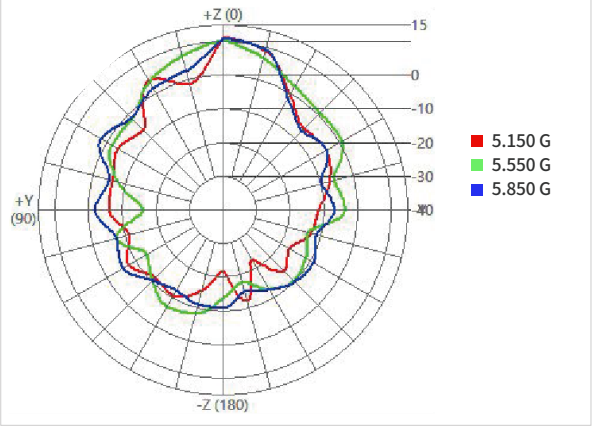
# Technical Specifications

| Compliance |
| --- |
| **Safety Compliance** |
| CB |
| **WEEE** |
| Yes |
| **RoHS** |
| Yes |
| **Regulatory Compliance** |
| FCC |
| CE |
| IC |
| UCKA |

# Antennas Patterns

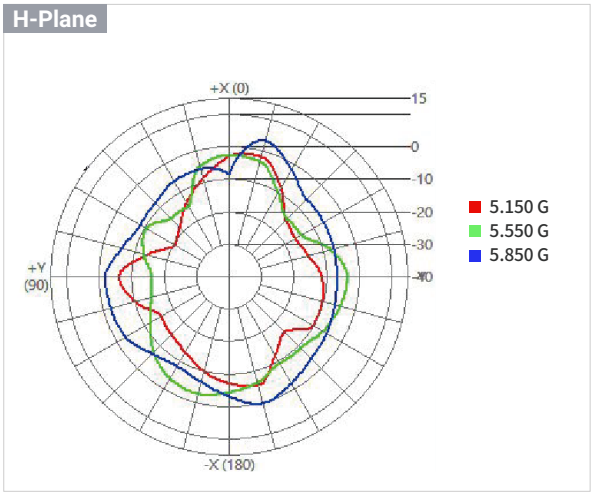
**Port1**

**E-Plane**



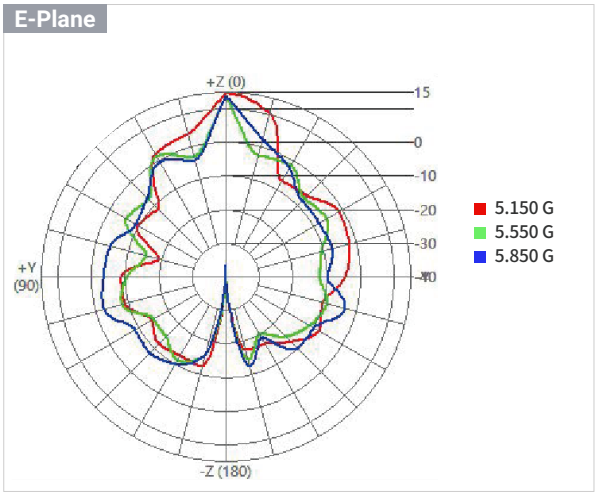

**Port1**

**H-Plane**



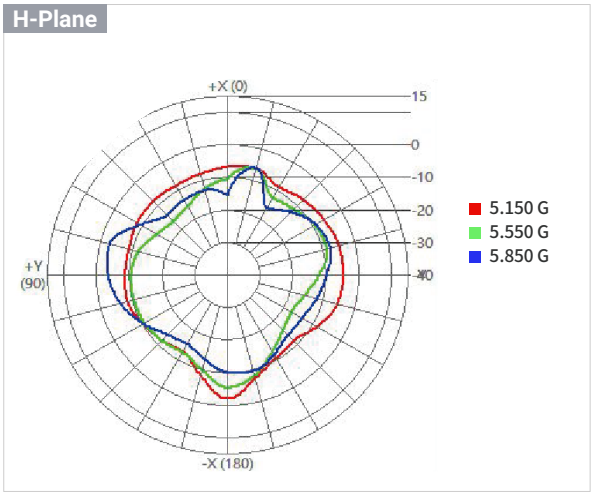

**Port2**

**E-Plane**




**Port2**

**H-Plane**



## Hardware Overviews

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