

# ENH500

LONG RANGE WIRELESS 11N OUTDOOR CB/AP

- IEEE802.11a/n
- 2T+2R
- 300Mbps
- 25 km
- High Performance



## PRODUCT OVERVIEW

**ENH500** Wireless Outdoor CPE features 13dBi high gain antenna dual polarization with high output power and high sensitivity can extend the transmission range to deliver a stable wireless connection. ENH500 integrates 4 operation modes: Access Point, Client Bridge, Client Router and WDS.

With integrated 13dBi dual-polarized antenna, help to reducing dead spots. Advanced multi-function operation modes offer flexibility in constructing scalable wireless networks for all possible applications. ENH500 is designed to deliver reliable service under harsh outdoor environment with certified IP65 protection and tailored to accommodate multimedia streaming services with data-rate up to 300Mbps. Most importantly, it is built-in encryption standards (WEP, WPA, WPA2, TKIP/AES and IEEE802.1x) ensure maximum security and compatibility.

| FEATURES                |  |
|-------------------------|--|
| <b>SPECIFICATIONS</b>   |  |
| High output power       | Transmit high output power programmable for different country selections   |
| High Data Rate          | High speed transmitting rate up to 300Mbps with 2T2R 802.11n   |
| Long range transmitting | Transmit power control and distance control (ACK timeout)  |
| Signal Strength Display | RF signal strength status indicates in LEDs of 3 colors, makes network build-up easier. LED indicators have the best transmit and receive signal for traffic communication |
| Multiple SSID           | 4 SSID supported. Each SSID can set itself wireless or WAN access setting  |
| <b>NETWORKING</b>       |  |
| PPPoE                   | Point-to-Point Protocol over Ethernet at Client Router mode. This function will keep trying when failed or disconnected  |
| PPTP                    | Point-to-Point Tunneling Protocol (PPTP) is a method for implementing virtual private networks   |
| 802.11i & 802.1x        | WPA, WPA2 & IEEE802.1x Authenticator   |
| <b>MANAGEMENT</b>       |  |
| Firmware Upgrade        | Upgrading firmware via web browser, setting are reserved after upgrade   |
| Reset & Backup          | Reset to factory default. User can export all setting into a file via WEB  |
| Ping & Trace Route      | Built-in PING function & Trace Route function in Web GUI   |
| MIB                     | MIB I, MIB II(RFC1213), Private MIB  |
| SNMP                    | V1, V2c  |

| SPECIFICATIONS     |   |
|--------------------|---|
| MCU                | Atheros AR7240  |
| RF                 | Atheros AR9280  |
| Memory             | 32MB  |
| Flash              | 8MB   |
| Standard           | IEEE 802.11 a/n   |
| Physical Interface | 2 x RJ-45 for 10/100 Fast Ethernet<br>1 x Reset Button  |
| Data rate          | 300 Mbps  |
| Security           | <ul style="list-style-type: none"> <li>- WEP Encryption-64/128/152 bit</li> <li>- WPAWPA2 Personal (WPA-PSK using TKIP or AES)</li> <li>- WPAWPA2 Enterprise (WPA-EAP using TKIP)</li> <li>- Hide SSID in beacons</li> <li>- MAC address filtering, up to 50 field</li> <li>- Wireless STA (Client) connected list</li> </ul> |
| Wireless/Network   | Auto Channel Selection (Setting varies by Regular Domains)<br>Distance Control (802.1x Ack timeout)<br>CLI Supported  |

|                      |  |                              |     |
|----------------------|--|------------------------------|-----|
|                      | <p>802.1x Supplicant (CB Mode)<br/>         Multiple SSID (4 SSID), BSSID<br/>         WDS AP / WDS Bridge / WDS Station<br/>         Multicast Supported<br/>         RADIUS Accounting<br/>         VLAN Tag / VLAN Pass-through<br/>         Auto Reboot<br/>         Obey Regulatory Power</p>   |                              |     |
| Antenna              | <p>Internal Directional 13dBi with dual polarization</p> <p style="text-align: center;"><b>Vertical (V-Plane) : 15°</b></p> <div style="display: flex; justify-content: space-around;"> <div data-bbox="517 725 963 1205"> <p style="text-align: center;">E-PLANE<br/>Far-field amplitude of 5G-01-H15.nsi</p> </div> <div data-bbox="999 741 1433 1205"> <p style="text-align: center;">E-PLANE<br/>Far-field amplitude of 5G-01-H10.nsi</p> </div> </div> <p style="text-align: center;"><b>Horizontal (H-Plane) : 60°</b></p> <div style="display: flex; justify-content: space-around;"> <div data-bbox="517 1312 963 1787"> <p style="text-align: center;">H-PLANE<br/>Far-field amplitude of 5G-01-H13.nsi</p> </div> <div data-bbox="999 1335 1433 1787"> <p style="text-align: center;">H-PLANE<br/>Far-field amplitude of 5G-01-H03.nsi</p> </div> </div> |                              |     |
| Certifications       | FCC, CE, IC  |                              |     |
| RADIO FREQUENCY BAND | Channel  | Rx Sensitivity Optimal (dBm) |     |
|                      | 802.11a (5.18 ~  | 6Mbps                        | -95 |
|                      |  | 9Mbps                        | -92 |

|  |                          |              |     |
|--|--------------------------|--------------|-----|
|  | 5.825GHz)                | 12Mbps       | -89 |
|  |                          | 18Mbps       | -85 |
|  |                          | 24Mbps       | -81 |
|  |                          | 36Mbps       | -79 |
|  |                          | 48Mbps       | -76 |
|  |                          | 54Mbps       | -75 |
|  | 802.11n(5.18 ~ 5.825GHz) | MCS0 / MCS8  | -94 |
|  |                          | MCS1 / MCS9  | -92 |
|  |                          | MCS2 / MCS10 | -88 |
|  |                          | MCS3 / MCS11 | -85 |
|  |                          | MCS4 / MCS12 | -80 |
|  |                          | MCS5 / MCS13 | -79 |
|  |                          | MCS6 / MCS14 | -74 |
|  |                          | MCS7 / MCS15 | -73 |

#### ENVIRONMENT AND MECHANICAL

|                           |   |
|---------------------------|---|
| Temperature Range         | Operating -20°C~70°C<br>Storage -30°C to 80°C |
| Humidity (non-condensing) | 0%~90% typical                                |
| ESD Protection            | 15KV (Certificated Standard is 8KV)           |
| Dimensions                | 260mm (L) x 84mm (W) x 55mm (H)               |
| Weight                    | 380g  |
| Waterproof                | IP65  |

#### PACKAGE CONTENT

|  |
|--|
| ▶ Wireless Long Range 11N CB/AP (ENH500) |
| ▶ PoE Injector (EPE-24R)                 |
| ▶ Power Adapter (24V/1A)                 |
| ▶ CD with User's Manual                  |
| ▶ QIG                                    |
| ▶ Mounting Set                           |
| ▶ Special screw set                      |