

# ENS500

Long Range Wireless 11N Outdoor AP /CB

- 2T+2R
- 11a/n
- 300Mbps
- CB/AP/CR/WDS

## PRODUCT OVERVIEW

**ENS500**, the high-efficient 10dBi directional antenna provides an optimum, extended real outdoor throughput performance via point to point transmission in long range distances. The good waterproof ability with compact, robust design can be diversely configured and operated in the extremely harsh outdoor environment. Its advanced multi-operation modes (CB, AP, CR, WDS AP, WDS Bridge and WDS Station) integrated with Network Management Software "EZ Controller" can offer variety uses in constructing scalable wireless network of all possible applications also allow centralized management via user-interface.



**ENS500** built-in encryption standards (IEEE802.1x, WEP, WPA, WPA2, TKIP/AES for CB/CR modes) ensure full-scale security protection. Along with Proprietary PoE support excellent long-range network installation when used in conjunction with its outdoor family ENH700EXT.

FEATURES	
<b>HARDWARE FEATURES</b>	
<b>High output power</b>	Transmit high output power programmable for different country selections
<b>High Data Rate</b>	High speed transmitting rate up to 300Mbps with 2T2R 802.11n
<b>Long range transmitting</b>	Transmit power control and distance control (ACK timeout)
<b>Signal Strength Display</b>	Indicate RF signal strength to be shown as LEDs of 3 colors, making network build-up easier. LED indicators have the best transmit and receive signal for traffic communication
<b>PoE Support</b>	Support proprietary 24V passive power over Ethernet
<b>SOFTWARE</b>	
<b>Multiple SSID</b>	4 SSID supported. Each SSID can set itself wireless or WAN access setting
<b>PPPoE</b>	Point-to-Point Protocol over Ethernet at Client Router mode. This function will keep trying when failed or disconnected
<b>PPTP</b>	Point-to-Point Tunneling Protocol (PPTP) is a method for implementing virtual private networks
<b>VLAN Pass-through</b>	Support VLAN Pass-through
<b>WiFi Scheduling</b>	User could set a schedule for turning-on/off WiFi Radio
<b>Firmware Upgrade</b>	Upgrading firmware via web browser, setting are reserved after upgrade
<b>Reset &amp; Backup</b>	Reset to factory default. User can export all setting into a file via WEB
<b>Ping &amp; Trace Route</b>	Built-in PING function & Trace Route function in Web GUI
<b>MIB</b>	MIB I, MIB II (RFC1213), Private MIB
<b>SNMP</b>	V1, V2c, V3

SPECIFICATIONS	
<b>HARDWARE SPECIFICATIONS</b>	
<b>MCU</b>	Atheros AR9344
<b>RF</b>	N/A
<b>Memory</b>	64MB
<b>Flash</b>	16MB

<b>Physical Interface</b>	2 x RJ-45 for 10/100 Fast Ethernet 1 x Reset Button			
<b>Power Requirements</b>	- Active Ethernet (Power over Ethernet) - Proprietary PoE design - Power Adapter 24V / 0.6A			
<b>RF SPECIFICATIONS</b>				
<b>Frequency Band</b>	802.11a/n			
<b>Data rate</b>	300Mbps			
<b>Radio Frequency Band</b> <b>(The Max. Power may be different depending on local regulations)</b>	<b>Channel</b>			
		<b>Data Rate</b>	<b>Tx Avg. Power (±2dBm)</b>	
			<b>Rx Sensitivity (±2dBm)</b>	
	802.11a (5.18 ~ 5.825GHz))	6Mbps	26	-95
		9Mbps	26	-92
		12Mbps	26	-89
		18Mbps	26	-85
		24Mbps	26	-81
		36Mbps	25	-79
		48Mbps	23	-76
		54Mbps	21	-75
	802.1n (2.412 ~ 2.472GHz)	MCS0 / MCS8	26	-95
		MCS1 / MCS9	26	-93
		MCS2 / MCS10	26	-90
		MCS3 / MCS11	26	-87
MCS4 / MCS12		24	-84	
MCS5 / MCS13		23	-79	
MCS6 / MCS14		22	-75	
MCS7 / MCS15	21	-73		
<b>Antenna</b>	Internal 10dBi Directional Antenna			
	Gain	10		
	VSWR	2.0 : 1		
	HPBW (H)	43°	39°	
	HPBW (V)	71°	61°	
<b>SOFTWARE SPECIFICATIONS</b>				
<b>Operation Mode</b>	Access Point / Client Bridge / Client Router / WDS			

<b>Wireless/Network</b>	<p>Auto Channel Selection (Setting varies by Regular Domains)</p> <p>Obey Regulatory Power</p> <p>Distance Control (802.1x Ack timeout)</p> <p>CLI Supported</p> <p>802.1x Supplicant (CB Mode)</p> <p>Multiple SSID (4 SSID), BSSID</p> <p>WDS AP / WDS Bridge / WDS Station</p> <p>Multicast Supported</p> <p>RADIUS Accounting</p> <p>VLAN Tag / VLAN Pass-through</p> <p>Auto Reboot</p> <p>WiFi Scheduling</p>
<b>Security</b>	<p>WEP Encryption-64/128/152 bit</p> <p>WPA/WPA2 Personal (WPA-PSK using TKIP or AES)</p> <p>WPA/WPA2 Enterprise (WPA-EAP using TKIP)</p> <p>Hide SSID in beacons</p> <p>MAC address filtering, up to 50 field</p> <p>Wireless STA (Client) connected list</p>
<b>QoS</b>	WMM

#### ENVIRONMENT AND MECHANICAL

<b>Temperature Range</b>	<p>Operating -20°C~70°C</p> <p>Storage -30°C to 80°C</p>
<b>Humidity (non-condensing)</b>	0% ~ 90% typical
<b>Dimensions</b>	186mm (L) x 100mm (W) x 29mm (H)
<b>Weight</b>	300g

#### PACKAGE CONTENT

▶ 1 x ENS500
▶ 1 x Power Adapter (24V/0.6A)
▶ 1 x PoE Injector (EPE1212)
▶ 1 x Pole Mount Set
▶ 1 x Screw Set
▶ 1 x Technical Support Card