

5GHz 300Mbps 13dBi Outdoor CPE

CPE510

⦿ Features:

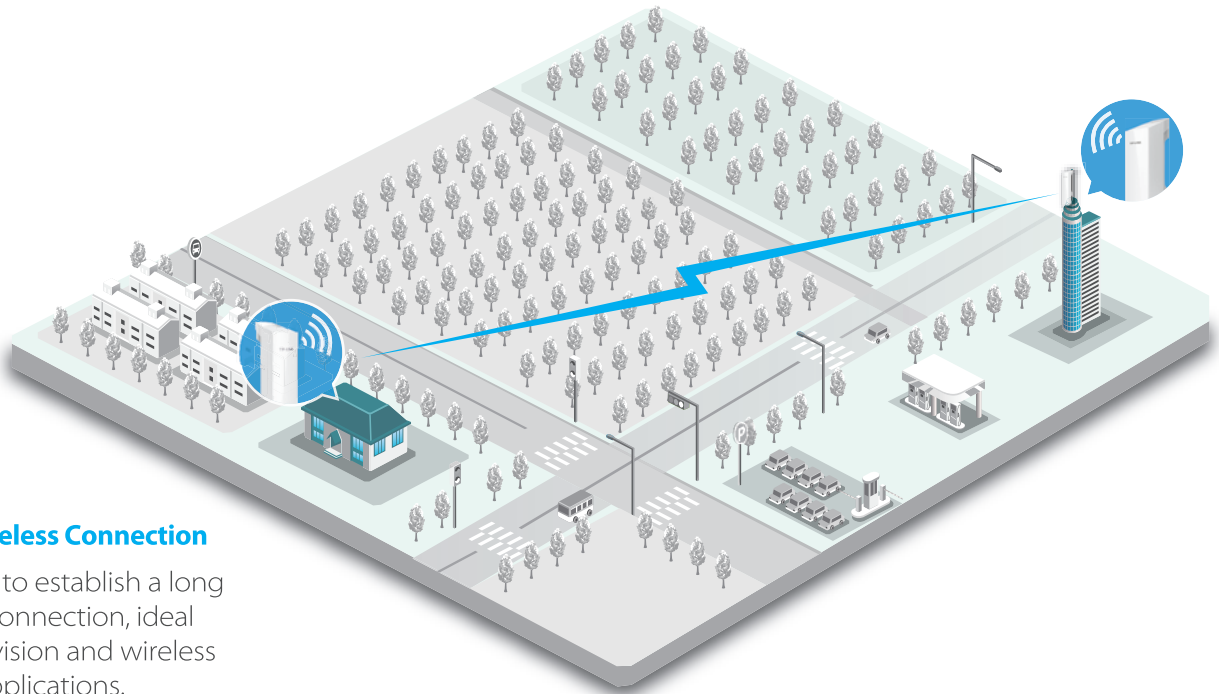
- Built-in 13dBi 2x2 dual-polarized directional MIMO antenna
- Adjustable transmission power from 0 to 27dBm/500mw
- System-level optimizations for more than 15km+ long range wireless transmission
- TP-LINK Pharos MAXtream (Time-Division-Multiple-Access) technology improves product throughput, capacity and latency performance, ideal for PTMP applications
- Centralized Management System – Pharos Control
- AP / Client / Repeater / Bridge / AP Router / AP Client Router (WISP) operation modes
- Passive PoE Adapter supports up to 60 meter (200 feet) Power over Ethernet deployment and allows the device to be reset remotely

⦿ Description:

TP-LINK's 5GHz 300Mbps 13dBi Outdoor CPE, the CPE510 is dedicated to cost effective solutions for outdoor wireless networking applications. With its centralized management application, it is flexible and ideal for point-to-point, point-to-multipoint and outdoor Wi-Fi coverage applications. Professional performance, coupled with user-friendly design, makes CPE510 an ideal choice for both business and home users.

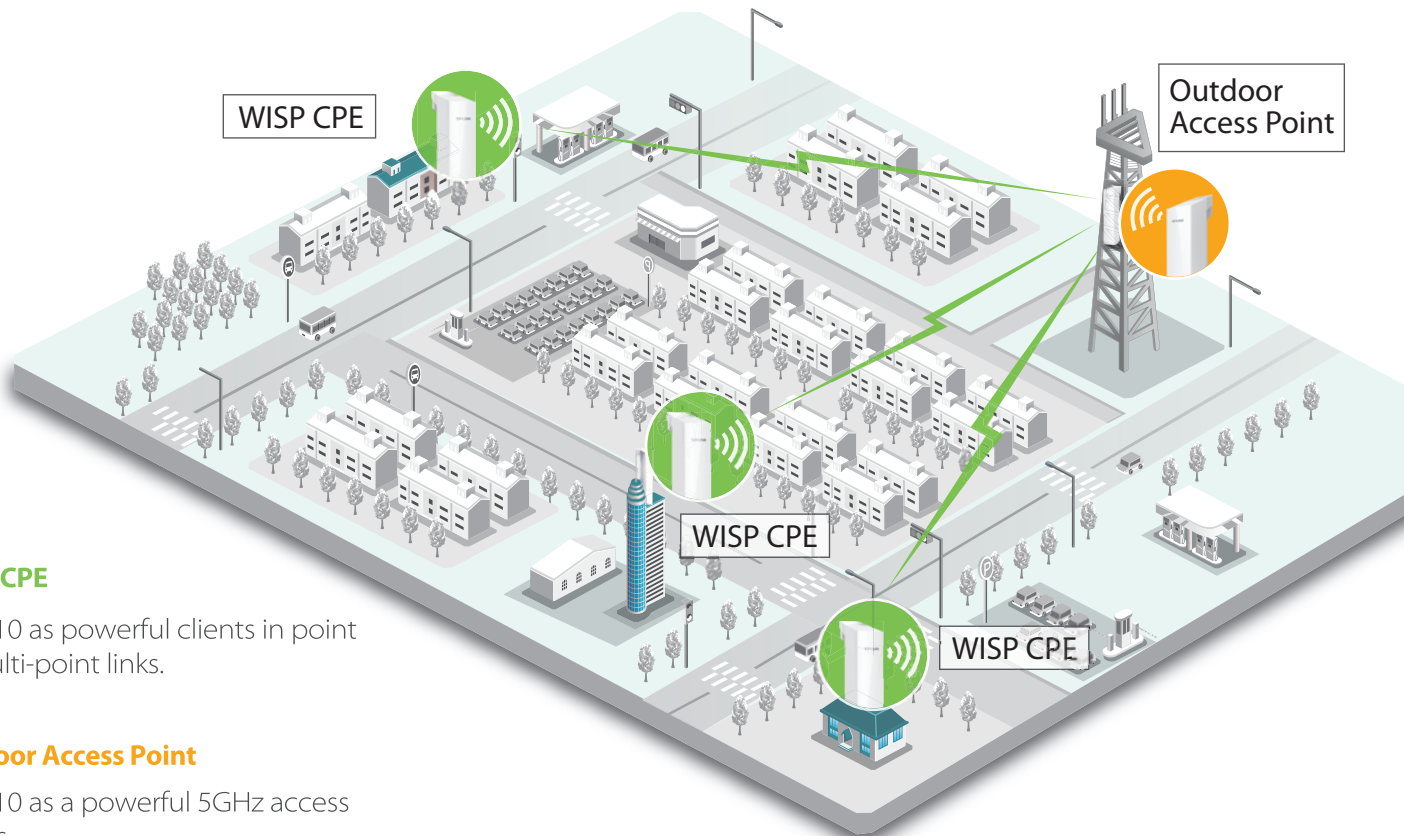


◎ Typical Applications:



- **Long-distance Wireless Connection**

Using two CPE510 to establish a long distance wireless connection, ideal for wireless supervision and wireless Internet sharing applications.



- **WISP CPE**

CPE510 as powerful clients in point to multi-point links.

- **Outdoor Access Point**

CPE510 as a powerful 5GHz access points.

Software Overview:

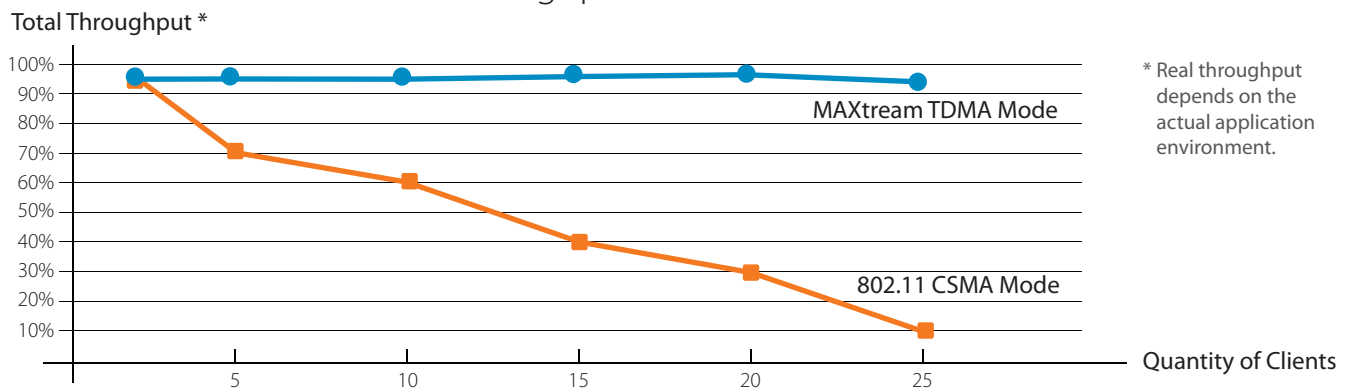


PHAROS is TP-LINK's next generation outdoor product series dedicated to long-range outdoor wireless networking solutions.

Advanced TP-LINK MAXstream TDMA Technology

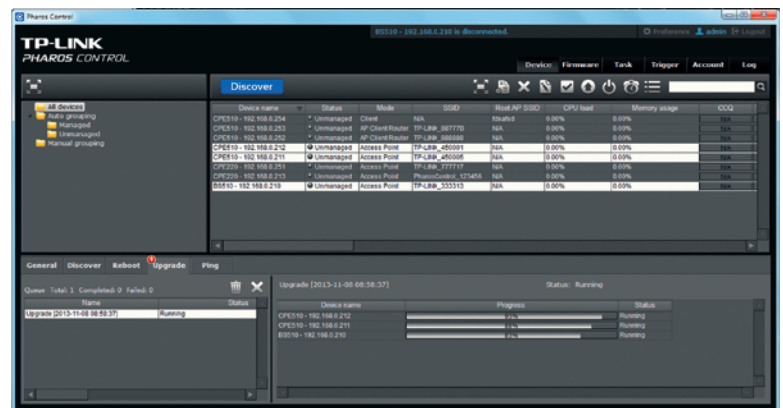
As network scale increases, wireless competition and collisions among CPEs and base stations will be so enormous that the real throughput of the network will drop, resulting in a serious impact on end-user experience, to mitigate these effects, TP-LINK's Pharos series uses MAXstream TDMA Technology.

Total Throughput vs Clients



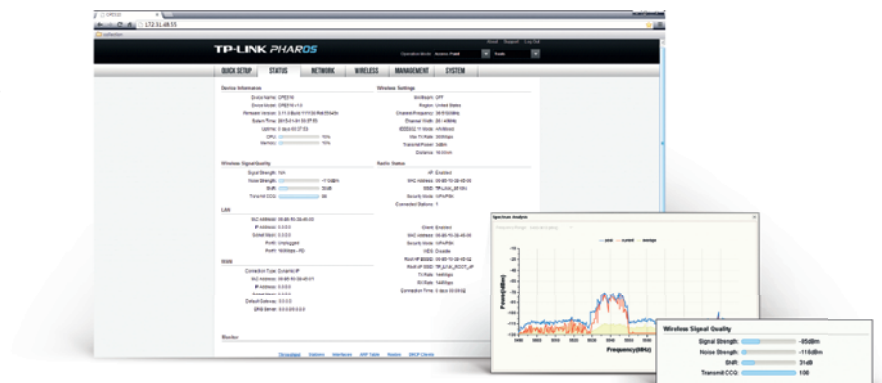
Pharos Control – Centralized Management System

Pharos series also comes equipped with centralized management software that helps users easily manage all the devices in their network from a single PC - Pharos Control. Functions like device discovery, status monitoring, firmware upgrading, and network maintenance can be managed using Pharos Control.



Pharos OS

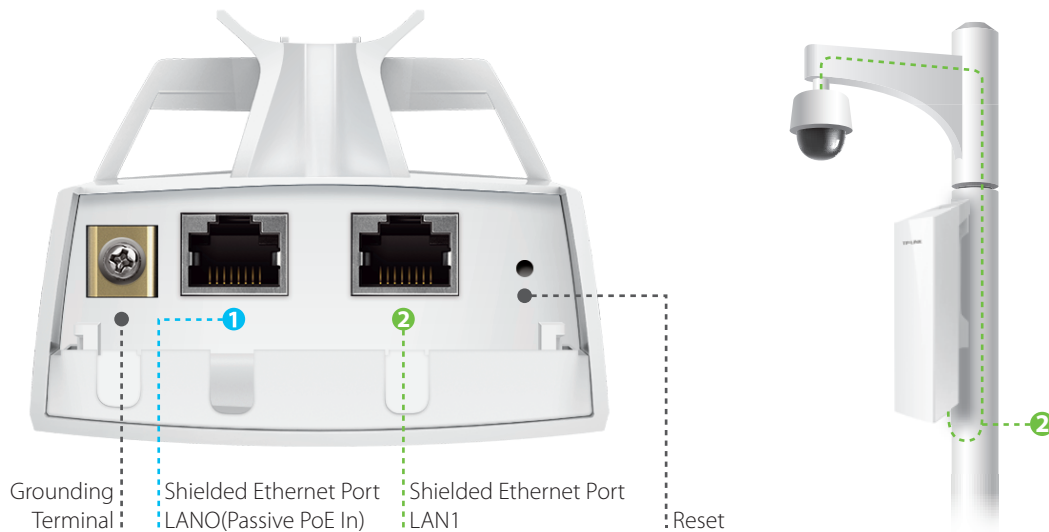
User-friendly web-based management system allows professionals to do more specific configurations



● Hardware Overview:

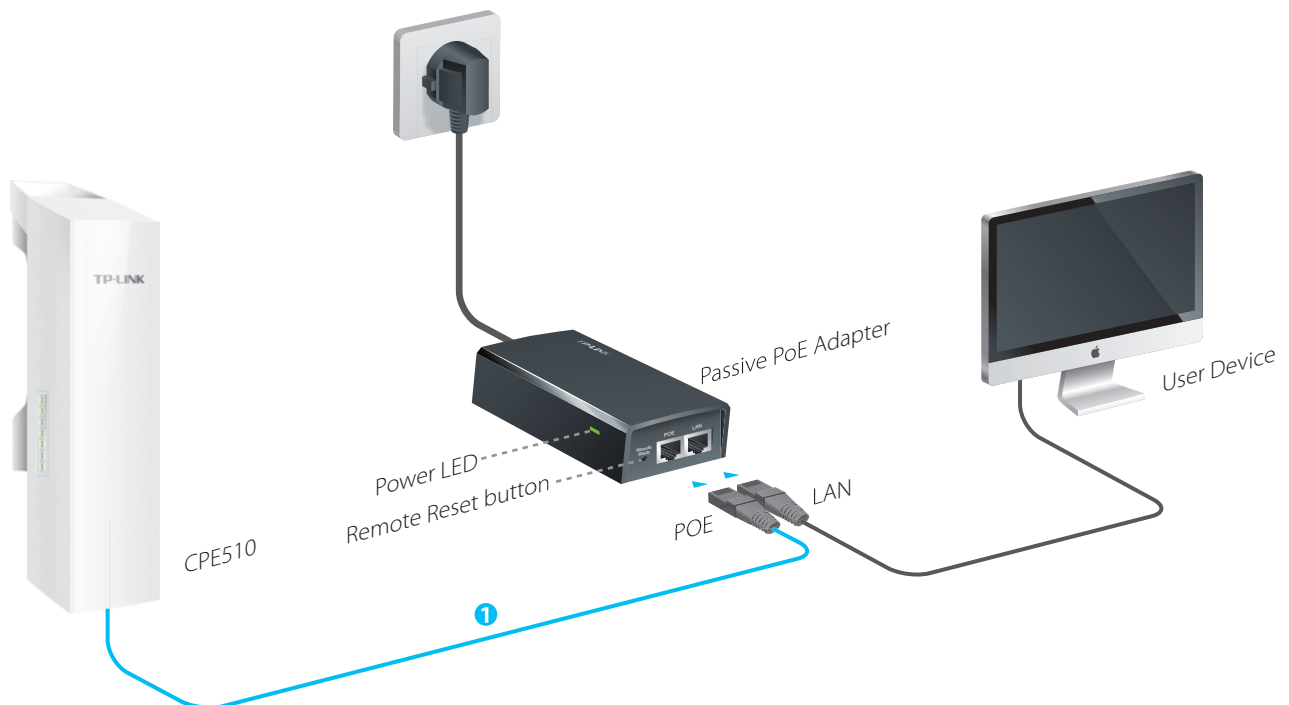
• Professional Outdoor Design

- Weatherproof enclosure with pole mounting design
- Secondary Ethernet port with software enabled PoE output allows for seamless IP camera connectivity.
- Shielded Ethernet ports and grounding terminal provide double protections against ESD attacks



• Easy Deployment and Maintenance

Passive PoE adapter makes installation easier, and its Remote Reset button allows for device to be reset remotely from power supply location.



⦿ Specifications:

HARDWARE FEATURES

Processor	Qualcomm Atheros Enterprise AR9350B 560MHz CPU, MIPS 74Kc	
Memory	64MB DDR2 RAM, 8MB Flash	
Interfaces	· 1 10/100Mbps Shielded Ethernet Port (LAN0, Passive PoE in) · 1 10/100Mbps Shielded Ethernet Port (LAN1, Passive PoE Passthrough) · 1 Grounding Terminal · 1 Reset Button	
Power Supply	· Passive Power over Ethernet via LAN0 (+4,5pins; -7,8pins) · Input voltage range: 16-27VDC (24V Passive PoE Adapter is provided)	
Power Draw	11 Watts Max Note: When deployed using Passive PoE, the power drawn from the power sourcing equipment will be higher by some amount depending on the length of the interconnecting cable.	
Dimensions (L x W x H)	224 x 79 x 60 mm	
Protection	· 15KV ESD Protection · 6000V Lightning Protection	
Enclosure	· Outdoor ASA stabilized plastic material · IPX5 waterproof Certification	

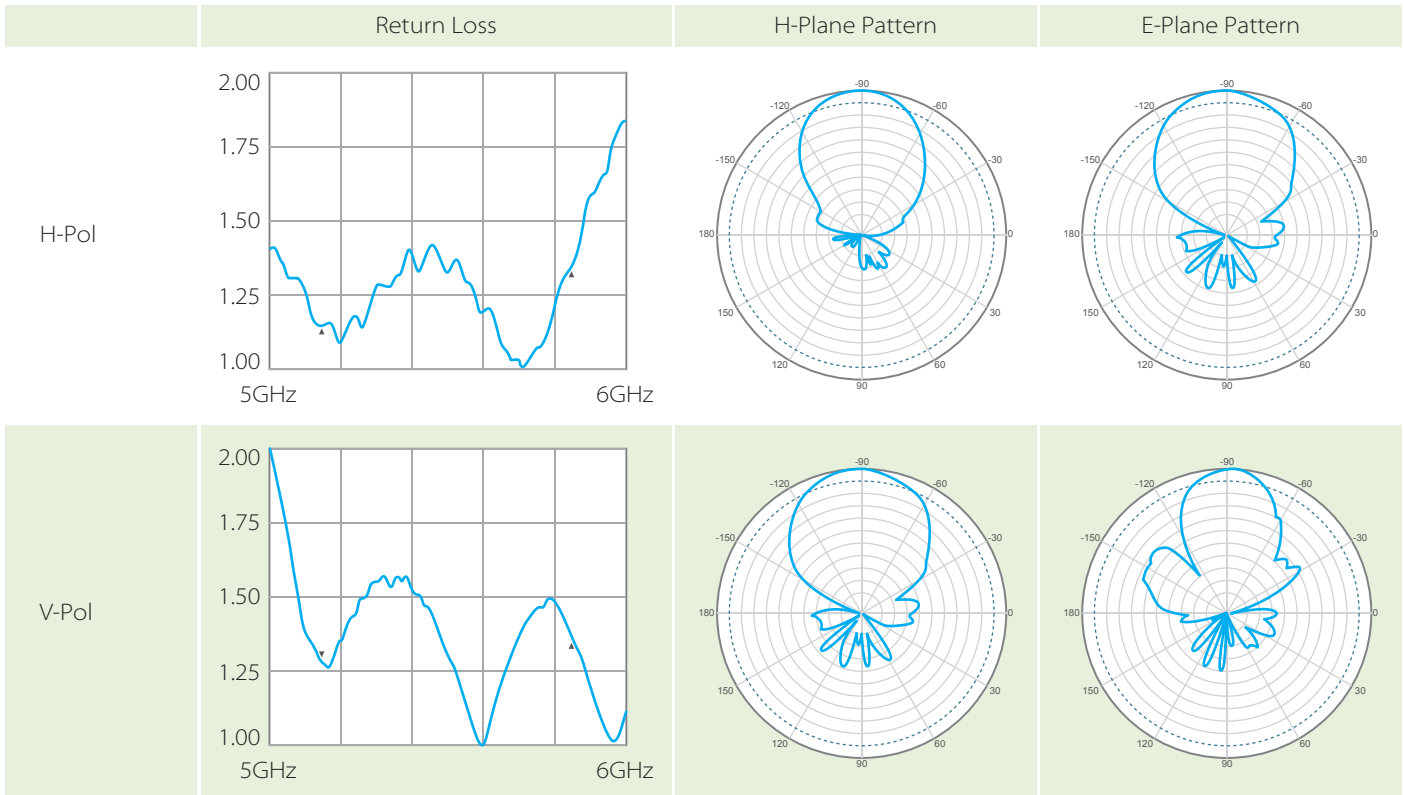
WIRELESS FEATURES

Wireless Standards	IEEE 802.11a/n (with Pharos MAXtream disabled)					
Proprietary Protocol	TDMA Mode (with Pharos MAXtream enabled)					
Operating Frequency	5.15~5.85GHz Note: Available operating frequency may vary depending on the limitations of the countries or regions in which the device is used. (Dynamic Frequency Selection is supported)					
Wireless Speed	Up to 300Mbps (40MHz,Dynamic) Up to 144.4Mbps (20MHz,Dynamic) Up to 72.2Mbps (10MHz,Dynamic) Up to 36.1Mbps (5MHz,Dynamic)					
Maximum Transmit Power	27dBm/500mw (Adjustable power by 1dBm) Note: Maximum transmission power may vary across different channels depending on the limitations of the countries or regions in which the device is used.					
Operation Modes	AP / Client / Bridge / Repeater / AP Router Mode /AP Client Router (WISP Client) Mode					
Wireless Security	WPA/WPA2, WPA-PSK/WPA2-PSK (AES/TKIP) Encryption, 64/128/152-bit WEP Encryption					
RF Specifications	Data Rates	Tx Power	Rx Sensitivity	Data Rates	Tx Power	Rx Sensitivity
	802.11a			802.11n		
	6-24Mbps	27	-95	MCS0	27	-93
	36Mbps	27	-83	MCS1	27	-90
	48Mbps	27	-76	MCS2	27	-88
	54Mbps	27	-75	MCS3	27	-83
				MCS4	27	-80
				MCS5	27	-76
				MCS6	26	-74
				MCS7	25	-73
				MCS8	27	-93
				MCS9	27	-90
				MCS10	27	-88
				MCS11	27	-83
				MCS12	27	-80
				MCS13	27	-76
				MCS14	27	-74
				MCS15	27	-73

◎ Specifications:

ANTENNA FEATURES

Gain	13dBi
Beamwidth	45° (H-Plane) / 30° (E-Plane)
VSWR	1.6 Max
Polarizations	Horizontal/Vertical
Cross-pol Isolation	18 dB Min



OTHERS

Certification	CE, FCC, RoHS, IPX5
Package Contents	CPE510 Passive PoE Adapter Power Cord Installation Guide Pole Mounting Straps
System Requirements	Microsoft Windows 98SE, NT, 2000, XP, Vista™ or Windows 8, Windows 7, MAC OS, NetWare, UNIX or Linux. Note: We recommend you to use one of following Web browsers for better experience: Google Chrome, Safari, and Firefox. IE browsers are not recommended.
Environment	Operating Temperature: -30°C~70°C (-22°F~158°F) Storage Temperature: -40°C~70°C (-40°F~158°F) Operating Humidity: 10%~90% non-condensing Storage Humidity: 5%~95% non-condensing