

## 2.4GHz/5GHz 300Mbps Outdoor Wireless Base Station

### WBS210/WBS510 Datasheet

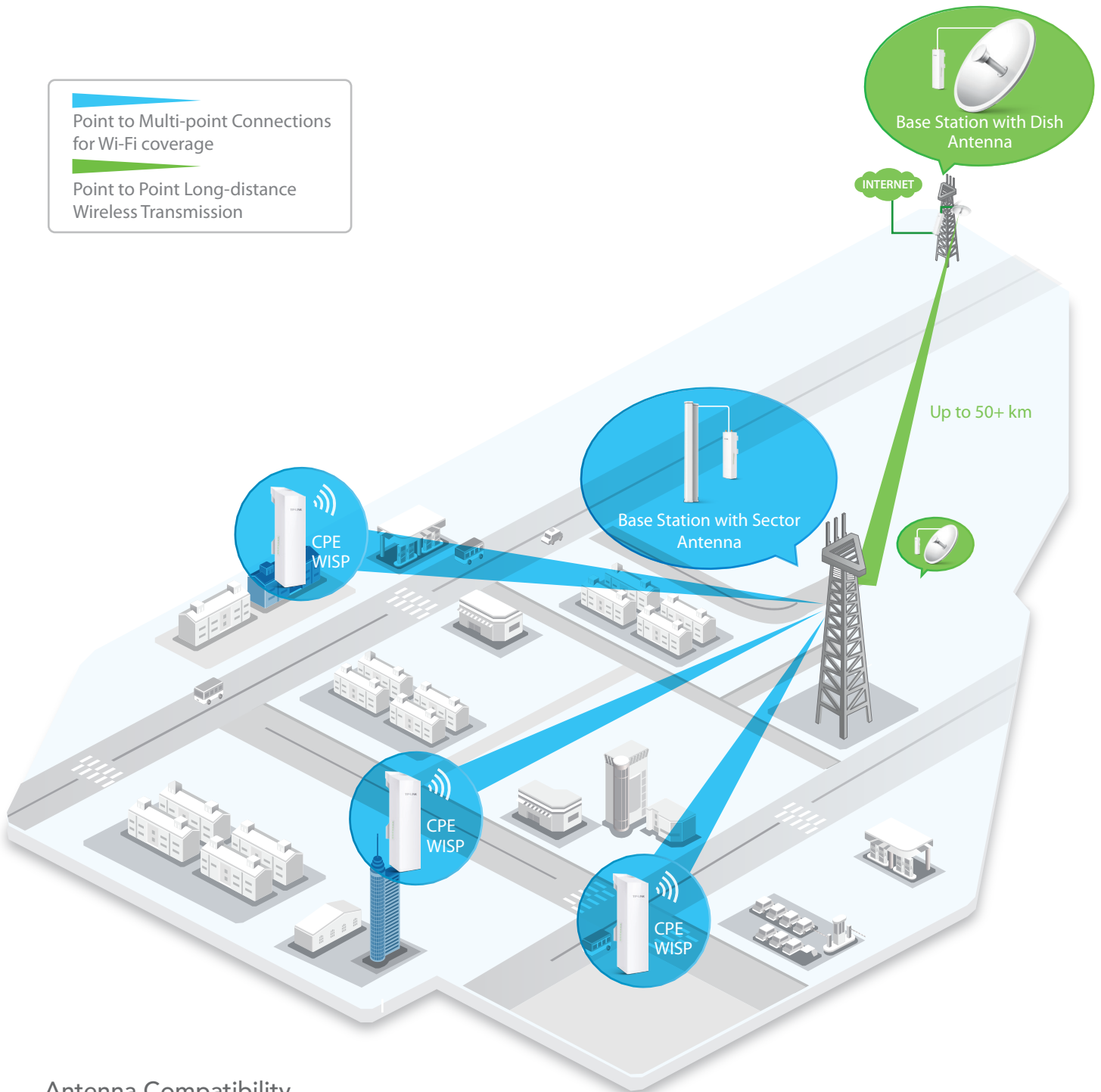
#### Highlights

- Broad operating frequency channels ensure less wireless interference
- Wireless N speed up to 300Mbps
- Selectable bandwidth of 5/10/20/40MHz
- Adjustable transmission power from 1 to 27dBm/500mW
- 2 RP-SMA connectors for external MIMO antenna
- Work with TP-LINK dish antenna for long-distance wireless data transfer up to 50km+
- 1 10/100Mbps Ethernet port for passive PoE and 1 10/100Mbps Ethernet port for extended applications
- 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



# Typical Applications

TP-LINK's Outdoor Wireless Base Station 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.



Point to Multi-point Connections for Wi-Fi coverage

Point to Point Long-distance Wireless Transmission

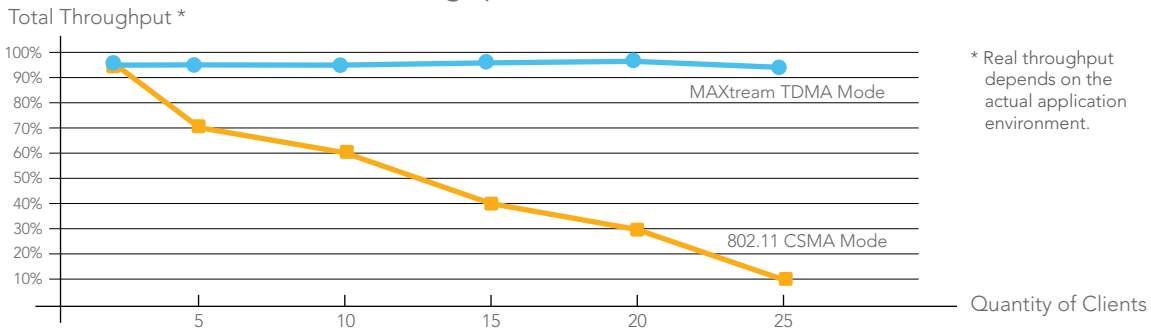
## Antenna Compatibility

Model	WBS510	WBS210
Dish	TL-ANT5830MD	TL-ANT2424MD
Sector	TL-ANT5819MS	TL-ANT2415MS

## TP-LINK MAXstream TDMA Technology

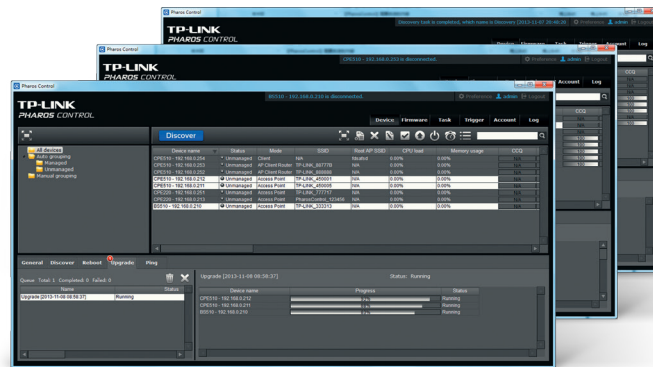
As network scale increases, wireless competition and collisions among CPEs will be so fierce that the real throughput of the network will drop, resulting in a serious impact on end-user experience, to mitigate these effects, TP-LINK's Pharos series uses MAXstream TDMA Technology.

Total Throughput vs Clients



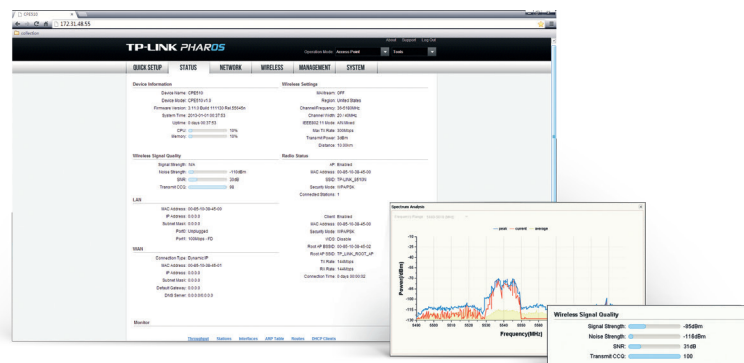
## Pharos Control – Centralized Management System

Pharos 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.



## PharosOS

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



# Specifications

Features & Performance			
Model	WBS210	WBS510	
Name	2.4GHz 300Mbps Outdoor Wireless Base Station	5GHz 300Mbps Outdoor Wireless Base Station	
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/POE) 1 10/100Mbps Shielded Ethernet Port (LAN1) 2 RP-SMA 1 Grounding Terminal 1 Reset Button	
	Power Supply	Passive Power over Ethernet via LAN0 (+4,5pins; -7,8pins) Voltage range: 16-27VDC	
	Dimensions(L x W x H)	189*75*32 mm	
	Protection	15KV ESD Protection 6KV Lightning Protection	
	Enclosure	Material: Outdoor ASA stabilized plastic Weatherproof: IP65 water and dust proof design	
Wireless Features	Wireless Standards	IEEE 802.11b/g/n	IEEE 802.11a/n
	Proprietary Protocol	TDMA Mode (with Pharos MAXstream enabled)	
	Frequency	2.4~2.483GHz	5.15~5.85GHz
	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 <sup>1</sup>	27dBm/500mW (Adjustable power by 1dBm)	
Software Features	Operation Modes	AP / Client / Bridge / Repeater / AP Router / AP Client Router (WISP Client)	
	Network Configurations	WAN: Static/Dynamic/PPPoE/L2TP/PPTP LAN: Static/Dynamic/DHCP Forwarding: DMZ/ALG/UPnP/Virtual Server/Port Trigger Security: SPI Firewall/ Ping Forbidden/VPN/DoS Protection Access Control Static Routing Bandwidth Control IP & MAC Binding	
	Wireless Configurations	Pharos MAXstream TDMA Technology WBS210: 802.11b/g/n Modes; WBS510: 802.11a/n Modes Selectable Channel Width: 5/10/20/40MHz Auto Channel Selection Transmit Power Control Dynamic Frequency Selection(DFS) WDS Enable/Disable Security: WPA/WPA2, WPA-PSK/WPA2-PSK (AES/TKIP) Encryption	

<sup>1</sup> Maximum transmit power is limited by local regulatory settings

## Features & Performance

Model		WBS210	WBS510
Name		2.4GHz 300Mbps Outdoor Wireless Base Station	5GHz 300Mbps Outdoor Wireless Base Station
Software Features	Wireless Configurations	64/128/152-bit WEP Encryption SSID Broadcast Enable/Disable Multi-SSID with VLAN Tagging (AP mode only) Distance/ACK Timeout Setting Wireless MAC Address Filter Wireless Advanced: Beacon Inteval/RTS Threshold/Fragmentation Threshold/DTIM Inteval/AP Isolation/Short GI/Wi-Fi Multimedia	
	Management	Discovery and Remote Management via Pharos Control application HTTP/HTTPS Web-based management System Log SNMP Agent (v2c) Ping Watch Dog Dynamic DDNS SSH Server	
	System Tools	Indicators: Signal Strength/Noise/Transmit CCQ/CPU/Memory Monitors: Throughput/Stations/Interfaces/ARP/Routes/WAN/DHCP Spectrum Analysis Speed Test Ping Traceroute	
	System-level Optimizations	WBS210: 802.11b/g/n Tx beamforming technology WBS510: 802.11a/n Tx beamforming technology IGMP Snooping/Proxy for multicast applications Hardware watch dog	
Others	Certification	CE, FCC, RoHS,IP65	
	Package Contents	Outdoor Wireless Base Station 24V 1A Passive PoE Adapter Pole Mounting Kit AC Power Cord Quick Installation Guide	
	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, 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	

## Features & Performance

POE Adapter Features	Dimensions(WxDxH)	110*57*33.5mm
	Input Voltage	100VAC-240VAC@50Hz-60Hz
	Input Current	0.8A Max @ 100VAC
	Output Voltage	24VDC (+4,5pins; -7,8pins)
	Output Current	1.0A Max (Support up to 60m Power over Ethernet)
	Efficiency	>80%
	Interfaces	1 AC Jack with Earth Ground 1 10/100/1000Mbps Shielded Ethernet Port (Power + Data) 1 10/100Mbps Shielded Ethernet Port (Data)
	Power LED	0~0.8A: Green 0.8A~1.0A: Red
	Certifications	CE/FCC/UL/IC/GS/PSB/C-tick/SAA/S-Mar



Details:<http://www.tplink.com/en/Support>  
German/Austrian/Swiss users are not included

[www.tp-link.com](http://www.tp-link.com)

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