2.4GHz/5GHz 300Mbps Outdoor Wireless Base Station

MODELS: WBS210/WBS510 Datasheet
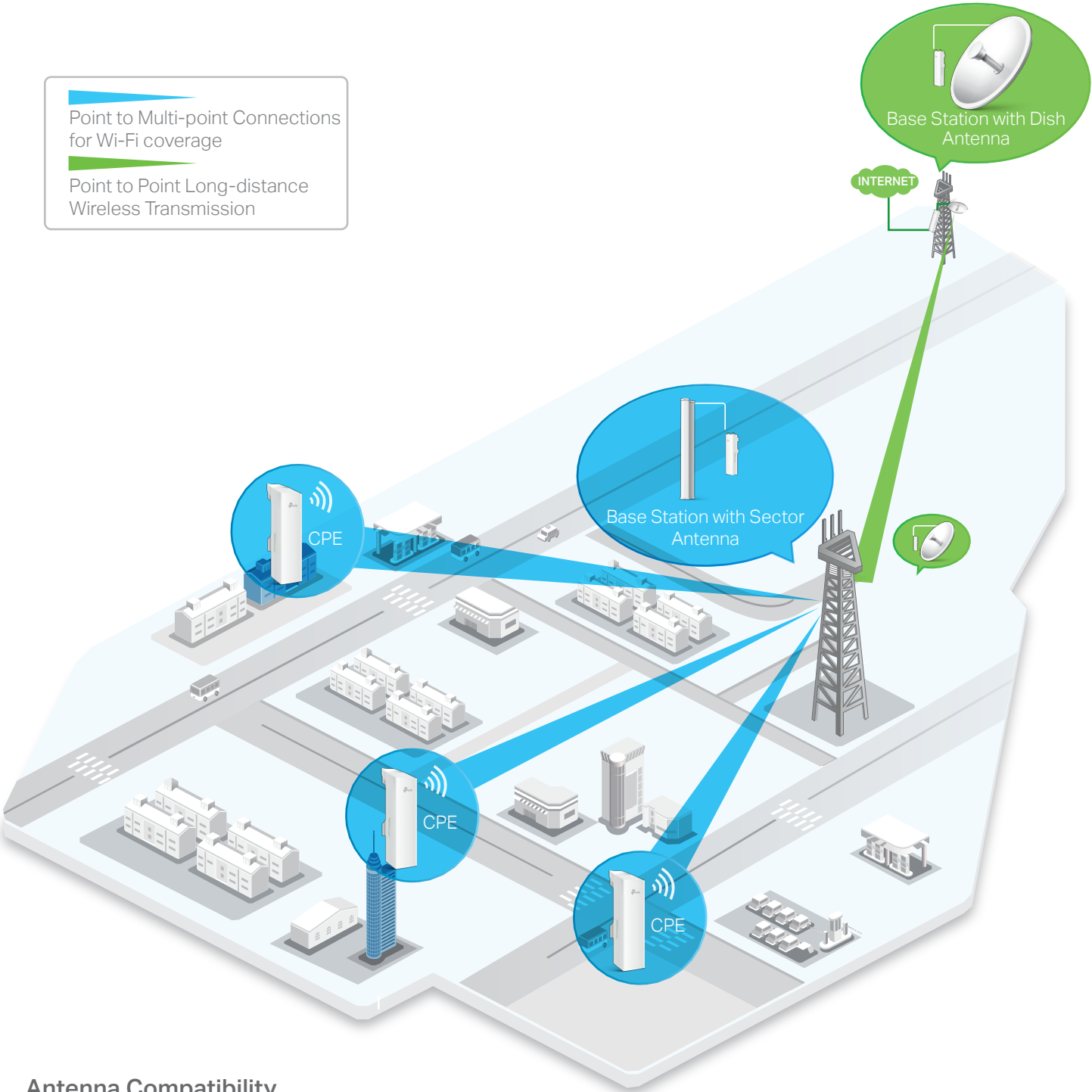
Highlights

-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.
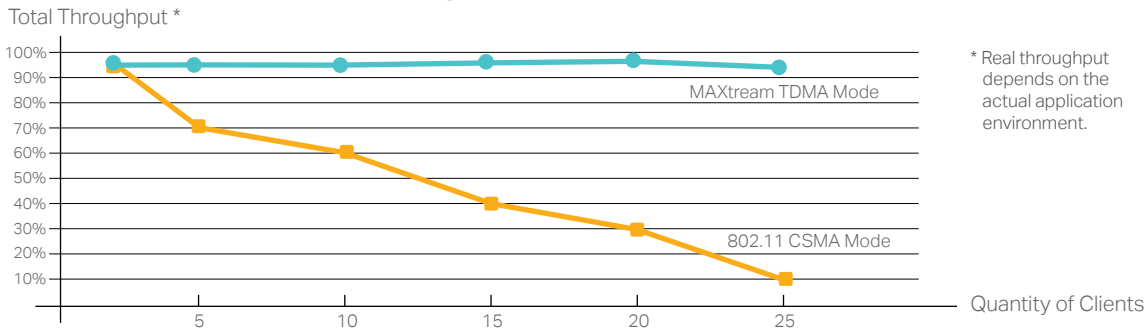
Point to Multi-point Connections for Wi-Fi coverage

Point to Point Long-distance Wireless Transmission

Base Station with Dish Antenna

INTERNET

Base Station with Sector Antenna

CPE

CPE

CPE

Antenna Compatibility

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

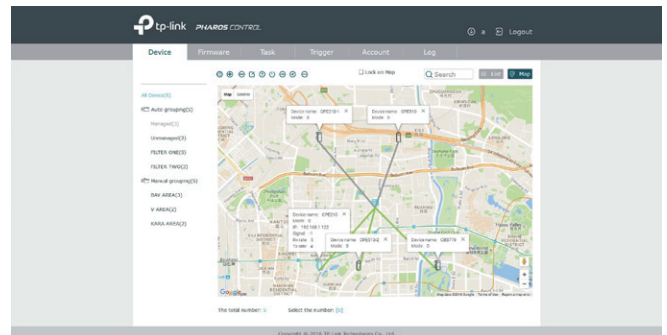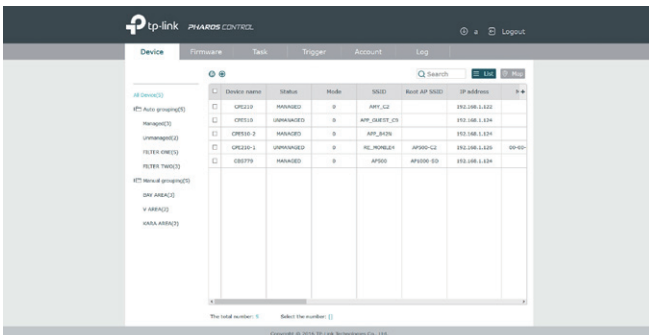tp-link

TP-Link MAXtream 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 MAXtream TDMA Technology.

Total Throughput vs Clients

Total Throughput *

MAXtream TDMA Mode

802.11 CSMA Mode

Quantity of Clients

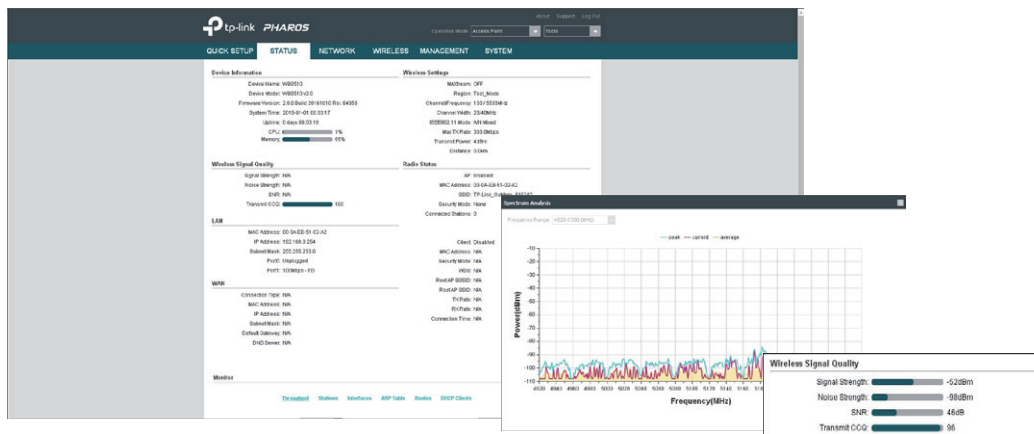* Real throughput depends on the actual application environment.

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.

PharOS

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

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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 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 6000V 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 MAXtream enabled)	
Frequency[1]	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[2]	27dBm/500mW (Adjustable power by 1dBm)	
Software Features		
Operation Modes	AP / Client / Bridge / Repeater AP Router Mode/AP Client Router(WISP Client)Mode	
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 MAXtream 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,	

1 Available operation frequency may vary depending on the limitaion of the countries or regions in which the device is used

2 Maximum transmit power is limited by local regulatory settings

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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 Intevel/RTS Threshold/Fragmentation Threshold/DTIM Intevel/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 Optimized 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, VistaTM 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: -40°C~70°C (-40°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 Others	Dimensions	110*57*33.5mm
	Input Voltage	100VAC~240VAC @50/60Hz
	Input Current	0.8A Max @ 100VAC
	Output Voltage	24VDC(+4,5pins; -7,8pins)
	Output Current	1.0A Max
	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/PSE

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