

WI-CPE521
5.8GHz 300Mbps
Outdoor Base-station with OMNI
antenna
Data sheet

## Highlights

- 500mW High power output, coverage up to 2KM for PTP and PTMP application
- Wireless A/N speed up to 300Mbps
- Support open frequency from 4920 to 6100 MHz
- Inside 360 degree12dBi OMNI Antenna Technology
- 27dBm High-Power design
- 2x2 MIMO Technology
- Passive PoE Adapter supports up to 100 meter
- 1 PoE Port design, 24V PoE adapter Included
- Qualcomm AR9344 600MHz Chipset,64MB RAM
- 10KV Lightning Protection
- Super TDMA Technology

			Operating Fred	uency	5470-5850MH	z		
	Tx Powe	er Specs				Rx Pow	er Specs	
	Data Rate	Tx Power	Tolerance			Data Rate	Sensitivity	Tolerance
	6-24 Mbps	27 dBm	±2dB	002.11-	6-24 Mbps	-94 dBm	±2dB	
802.11a	36 Mbps	25 dBm	±2dB		36 Mbps	-82 dBm	±2dB	
802.11a	48 Mbps	23 dBm	±2dB		802.11a	48 Mbps	-78 dBm	±2dB
	54 Mbps	22 dBm	±2dB		54 Mbps	-75 dBm	±2dB	
	MCS0	27 dBm	±2dB			MCS0	-93 dBm	±2dB
	MCS1	27 dBm	±2dB	802.11n	MCS1	-88 dBm	±2dB	
	MCS2	27 dBm	±2dB		MCS2	-86 dBm	±2dB	
	MCS3	27 dBm	±2dB		MCS3	-82 dBm	±2dB	
	MCS4	26 dBm	±2dB		MCS4	-80 dBm	±2dB	
	MCS5	24 dBm	±2dB		MCS5	-75 dBm	±2dB	
	MCS6	22 dBm	±2dB		MCS6	-73 dBm	±2dB	
802.11n	MCS7	21 dBm	±2dB		MCS7	-72 dBm	±2dB	
002.1111	MCS8	27 dBm	±2dB		MCS8	-93 dBm	±2dB	
	MCS9	27 dBm	±2dB		MCS9	-89 dBm	±2dB	
	MCS10	27 dBm	±2dB		MCS10	-87 dBm	±2dB	
	MCS11	27 dBm	±2dB		MCS11	-82 dBm	±2dB	
	MCS12	26 dBm	±2dB			MCS12	-81 dBm	±2dB
	MCS13	24 dBm	±2dB			MCS13	-75 dBm	±2dB
	MCS14	22 dBm	±2dB			MCS14	-73 dBm	±2dB
	MCS15	21 dBm	±2dB		MCS15	-72 dBm	±2dB	

INTEGRATED 2x2 MIMO ANTENNA			
Frequency	5470-5850MHz	VSWR	1.5 : 1
Gain	11-13dBi	V-Pol Beamwidth	360
Isolation	23dB+	H-Pol Beamwidth	360
Polarity	Dual Polarity(V and H)	Vertical Plane Beamwidth	11
VSWR		Isolation	
VPOL-E	VPOL-H	HPOL-E	HPOL-H

## Product



## Description

Wi-Tek's WI-CPE521 Is a is an high capacity wireless outdoor AP integrated with antenna, using Qualcomm Atheros AR9344 high-performance processor and 2x2 MIMO Technology. The maximum access number is 100+ clients. It is revolutionary radio-infeed dish design with high performance, cost-effective and dedicated to long distance wireless network solutions. Featuring the revolutionary Wi-Tek TDMA technology, WI-CPE521 is fully compatible with Wi-Tek base station and CPE thus greatly improving the network scalability in throughput and latency. With 360degree 12dBi dual-polarized sector antenna, can work with WI-CPE515 or WI-CPE518 for point to multipoint wireless transmission. WI-CPE521 is best applied to rural wireless Internet, wireless backhaul and other industrial wireless solutions.

**Typical Applications** 



## Specifications

HARDWARE FEATUR	HARDWARE FEATURES		
Processor	Qualcomm AR9344		
Memory	64MB SDRAM 8MB Flash		
Interface	1X10/100BASE-TX Ethernet Interface		
Power Supply	24V Passive PoE Adapter Included		

Power Consumption	8W
Dimensions ( H x W x D )	100x785x587mm
Antenna Type	Built-in 12dBi Dual-polarized 360degree  OMNI Antenna  Horizontal beam width: 360degree  Vertical beam width: 11degree
Protection	10KV Lightning Protection
Enclosure	Outdoor UV Stabilized Plastic IP67 waterproof Certification

WIRELESS FEATURE	WIRELESS FEATURES		
Wireless Standards	802.11a/n		
Protocol	CSMA/CA,TCP/IP,IPX/SPX, NetBEUI, DHCP TDMA		
Wireless Mode	AP,Client		
Wireless Speeds	11a:54M,48M,36M,24M,18M, 12M,9M,6Mbps 11n:6.5M, 13M, 13.5M, 19.5M, 26M, 27M, 39M, 40.5M, 52M, 54M, 58.5M, 65M, 81M, 108M,		

WIRELESS FEATURES		
	121.5M,135M,150M, 270M,300Mbps	
Frequency	4920-6100MHz	
Transmission Power	27dBm(500mW)	

SOFTWARE FEATURES				
Wireless Configurations	802.11a/n Modes Selectable Channel Width: 20/40MHz Automatic Channel Selection Transmission Power Control Dynamic Frequency Selection (DFS) WDS Enable/Disable Security: WPAWPA2, WPA- PSK/WPA2-PSK (AES/TKIP) Encryption, 64/128/152-bit WEP Encryption SSID Broadcast Enable/Disable Distance/ACK Timeout Setting Wireless MAC Address Filter Wireless Advanced: > Beacon Interval/RTS Threshold/Fragmentation > Threshold/DTIM			

SOFTWARE FEATURES	3
	Interval/AP Isolation/Short GI/Wi-Fi Multimedia
Management	WEB management
System-level Optimizations	Optimized IGMP Snooping/Proxy for multicast applications Hardware watch dog

OTHERS	
Certification	CE
Package Contents	1*CPE 1*PoE Adapter

OTHERS	
	1* Pole Mounting Kit included
System Requirements	Microsoft Windows 98SE, NT, 2000, XP, Vista™ or Windows 10, Windows 8, Windows 7, MAC OS, NetWare, UNIX or Linux. Note: We recommend you to use one of following Web browsers for an improved user experience: Google Chrome, Safari, and Firefox. IE browsers are not recommended.
Environment	Working Temp: -40 ~ 70°C Storage Temp: -40 ~85°C Working Humidity: 10%~95% non-condensing

