

PCWL-0500 Series Specifications

Access line									
Model	PCWL-0500		PCWL-0510	Model	PCWL-0500		PCWL-0510		
Wireless Module	2.4GHz:IEEE802.11b/g/n/ax			Multi-SSID	Up to 16 Multi SSIDs can be set				
	5GHz:IEEE802.11a/n/ac/ax				2.4GHz band: 8 units, 5GHz band: 8 units				
Maximum transfer rate*1	IEEE802.11b:11Mbps			Wireless Authentication Security	2.4GHz band: 128				
	IEEE802.11g:54Mbps				5GHz band: 128				
	IEEE802.11a:54Mbps				Open, WPA/WPA2-Parsonal, WPA2-Personal, WPA/WPA2-Enterprise,				
	IEEE802.11n:288Mbps(20MHz),600Mbps(40MHz)				WPA2-Enterprise, WPA3-Personal, WPA2/WPA3-Personal, WPA3-Enterprise,				
	IEEE802.11ac:346Mbps(20MHz),800Mbps(40MHz), 1733Mbps (80MHz)				WPA2/WPA3-Enterprise, WPA3-Enterprise(192bit), OWE				
	IEEE802.11ax:572Mbps(20MHz),1144Mbps(40MHz), 2400Mbps(80MHz),4800Mbps(160MHz)								
MIMO Space Stream	4 (both 2.4GHz and 5GHz supported)*2			Other Features	IEEE802.11k/v/r available*4				
Peak Antenna Gain	2.4GHz : 3dBi 5GHz : 4 to 6dBi (depends on frequency band)		2.4GHz : 4.5dBi 5GHz : 7dBi		VLAN support				
Radio output	Max. 17dBm (varies depending on frequency band)				Traffic shaping function *5				
Frequency band*3	2.4GHz band:IEEE802.11b/g/n/ax : 2.412 ~ 2.472GHz				Port forwarding (in router mode)*5				
	2.4GHz band:11ch~13ch				MAC address filtering				
	5GHz band:IEEE802.11a/n/ac/ax : 5.15 ~ 5.75GHz				Terminal-to-terminal communication settings				
	5GHz band:W52: 36 ~ 48ch								
	5GHz band:W53: 52 ~ 64ch								
	5GHz band:W56: 100 ~ 144ch 5GHz band:W58: 149 ~ 165ch								
Wireless backhaul line									
Wireless module	5GHz IEEE802.11a/n/ac/ax		5GHz/4.9GHz IEEE802.11a/n/ac/ax	MIMO space	4*2				
	IEEE802.11a/g/n/ac for radar scanning		IEEE802.11a/g/n/ac/ax for radar scanning	Routing control	PicoCELA's original method Dynamic tree control with adaptive route update				
Maximum transmission rate*1	IEEE802.11a : 54 Mbps			Frame forwarding	PicoCELA's original method L2 multi-stage bridge scheme with periodic intermittent transmission				
	IEEE802.11n : 288Mbps(20MHz),600Mbps(40MHz)				AES encryption with SAE method				
	IEEE802.11ac: 346 Mbps (20 MHz), 800 Mbps (40 MHz), 1733 Mbps(80 MHz)								
Peak Antenna Gain	5GHz : 4 to 6 dBi (depending on frequency band)		5GHz :7dBi	Other Features	Wired/wireless hybrid backhaul relay function				
	Max.19dBm (depends on frequency band)				WLAN Interface setting function (Eth-up port, PPPoE)				
Frequency band*3	-		4.9GHz band :802.11a/n/ac/ax : 4.9 ~ 5.0GHz		Fast DFS function				
	-		4.9GHz band :W49 : 184 ~ 196ch*7		Variable minimum CW length setting function				
	5GHz band:802.11a/n/ac/ax : 5.15 ~ 5.850GHz				Variable maximum retransmission count setting function				
	5GHz band:W52 : 36 ~ 48ch 5GHz band:W53 : 52 ~ 64ch 5GHz band:W56 : 100 ~ 144ch 5GHz band:W58 : 149 ~ 165ch				Fast route recovery function				
Attached antenna / for access line									
Peak Antenna Gain	2.4GHz : 3dBi		2.4GHz : 4.5dBi		Antenna weight	21g		70g	
	5GHz : 4 to 6dBi (depends on frequency band)		7dBi						
Size	φ19mm x 153mm		φ22 mmx 183 mm		Connector specification	RP-SMA Plug		N-plug	

Attached antenna / For backhaul line

Model	PCWL-0500	PCWL-0510	Model	PCWL-0500	PCWL-0510
Peak Gain	2.4GHz : 3dBi	2.4GHz : -	Antenna Size	φ19mm x 153 mm	φ22mm x 183 mm
	5GHz : 4~6dBi (depends on frequency band)	5GHz : -	Antenna weight	21g	70g
	4.9GHz/5GHz band : -	4.9GHz/5GHz band : 7dBi	Connector specification	RP-SMA Plug	N plug

Attached antenna / for BT and radar scan (RDR)

Peak Antenna Gain	BT : 2.4GHz : 1dBi	BT : 2.4GHz : 2dBi	Antenna weight	10.5g	52.5g
	RDR : 5GHz : 2dBi	RDR : 5GHz : 2dBi			
Antenna Size	φ7.56mm x 28.4mm	φ22mm x 70mm	Connector specification	RP-SMA Plug	N plug

Main unit and others

SoC	IPQ8072A / Quad-core ARM A53	IPQ8074A / Quad-core ARM A53	DC input	Voltage:DC in: 12V±5%	
				Plug:Standard DC plug	Plug:M8(3-pin)
Memory/Storage	RAM : 2GB、eMMC : 16GB		Body Size	260mm x 205mm x 52mm (excluding antenna)	304mm x 294mm x 82mm (excluding antenna)
External interface	2.5GbE port x 2, PoE+/PoE++(IEEE802.3at/bt) *6	2.5GbE port x 2, PoE+/PoE++(IEEE802.3bt) *6	Body Weight	Approx. 1700g	Approx. 3200g
	USB3.0 x 1	-	Body electricity consumption	Max.30W	Max.30W
	Status lamp display x 6	Status lamp indication x 6			
	Reset button x 1				
	Reroute button x 1		Operating Temperature Range	0°C~ 50°C	-30°C~ 60°C
External antenna terminal	Access line: RP-SMA x 4	Access line: N connector x 4	Waterproof and Dustproof	-	IP67
	backhaul line: RP-SMA plug x 4	N connector x 4			
	scanning: RP-SMA x 1	N connector x 1	Attachment for mounting	Wall/ceiling mounting plate	Dedicated bracket for wall/ pole mounting
	BT: RP-SMA x 1	N connector x 1			

AC adapter (optional product): HYT-1205000

Model No.	HYT-1205000	RKPO-JET1205000CD-6	Operating temperature range	0°C~ 40°C	
Input voltage	100 ~ 240Vac		Body size	53mm x 34mm x 119mm	50mm x 40mm x 140mm
Input frequency	50 ~ 60Hz		DC output plug size	Standard DC plug	M8 (3-pin)
Output voltage	12V ± 5%		Code length	DC cable cord length: 1.5m	DC cable cord length: 2.7m
Output Current	Max 5A			AC cable cord length: 1.2m	AC cable cord length: 1.2m
Output Power	Max 60W				

Directional antenna (Optional product)

Model	PCWL-0500	PCWL-0510
Wireless LAN specification	-	IEEE802.11b/g/n/a/ax (2.4GHz and 5GHz simultaneous communication possible)
Body size	-	200mm x 218mm x 50mm
Body Weight	-	Approximately 400g
Operating temperature range	-	-30°C~ 60°C
Attachment for mounting	-	Dedicated mounting attachment

*1: Maximum transmission rate means bearer rate and does not guarantee the achievement of each speed.

*2: At using 802.11n/ac/ax mode

*3: Available frequency bands are defined by radio laws of each country.

*4: 802.11v/r is a PicoManager linked function. Settings can be made via PicoManager.

*5: PicoManager linked function. Configuration can be done from PicoManager.

*6: Only the Eth-up port supports PoE power receiving.

*7: Application for registration station is required to use 4.9GHz band. Technical operation requires a third class land special radio technician or higher.

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