AP58V2 User Manual



This is the manual of outdoor CPE, which will approximate guide you how to set and apply the outdoor CPE, it provide a convenient graphical interface for network construction and maintenance person, as well as a user through a simple and accurate operation, and configuration management of the CPE.

1st Connection and Power Supply

1st: Port Connection and power supply

Instruction of different port:



P1 CPE Port Connection

1) Please use a power supply of 12V DC adapter or 24V POE adapter, WAN / LAN port is the PoE Port.



Pls make sure the CPE's power supply is normal in reset process, or the CPE will be damaged and can't reboot

2) Reset:

There are two ways to reset the CPE:

a).CPE Manage page: Click "Management", then "Save/Reload Settings", then click "Reset Settings" to finish the CPE Reset

Quick Setup	Sys	tem Sta	tus Operation Mode 5.		5.8GHz Wireless	Network Se	etting	Management		
Time Zone Setting Log		Upç	grade Firmware	Save/Reload Settings		Password				
Save/Reload Settings										
Save Settings to File			ile Save Settings							
Load Settings from File			ile Upload Setting	IS J			浏览			
Reset Settings to Default			ult Reset Settings							
System Reboo			oot System Reboo	ət						

b) Press the Reset Button on CPE more than 15 seconds, then release, the device will reboot and restore to factory settings

3) The connection way of CPE, PoE Adapter and PC:



P2 Connection diagram of CPE and PoE adapter



Incorrect Connection or the use power adapter and PoE adapter not from our factory, the CPE will be damaged

2nd Steps: Login

1) Connect the CPE with computer as P2 picture

2) Configure the PC's local connection IP address as 192.168.188.X (X is number from 2 to 252), subnet mask is 255.255.255.0, follow P3 and P4 to finish.



P3 Setting of computer's IP address

	General
ieneral Advanced	
Connect using	You can get IP settings assigned automatically if your network supports this capability. Diherwise, you need to ask your network administrator for the annonuate IP settings
Configure	une opprogramme in securitys.
This connection uses the following items:	Obtain an IP address automatically
Client for Microsoft Networks	Use the following IP address:
Reference Contract Starting for Microsoft Networks	IP address: 192 . 168 . 188 . 10
QoS Packet Scheduler Son Thermet Protocol (TCP/IP)	Subnet mask: 255 . 255 . 255 . 0
	Default gateway:
Install. Uninstall Properties	Obtain DNS server address automatically
Transmission Control Protocol/Internet Protocol. The default	Use the following DNS server addresses:
wide area network protocol that provides communication across diverse interconnected networks.	Preferred DNS server:
Show icon in notification area when connected	Alternate DNS server:
Notify me when this connection has limited or no connectivity	Advanced

P 4 Setting of computer's IP address

3) Input http://192.168.188.253 into IE browser, then pop up the login page, the default login user name: admin,

Passwords: admin, pls do following P5

Windows Security ×
iexplore.exe The server 192.168.188.253 is asking for your user name and password. The server reports that it is from ./. Warning: Your user name and password will be sent using basic authentication on a connection that isn't secure.
admin admin Remember my credentials
OK Cancel

P5 Login

4) After login, then P6 will be showed:

	High-performance OutDoor 300M AP/CPE
Quick Setup Device Status Gateway Mode	Terminal OF AP
(()) Repeater Mode	Operation Mode:AP Mode
1.1	LAN Interface Setup
🛜 AP Mode	IP Address 192.168.188.253
	MAC Address 78:D3:8D:C1:C5:0F
((C) WISP	Location Information
**	AP Location
Advanced Settings	AP Name
	WI AN Status Enabled
CPU Frequency:535MHz	SSID WirelessAP
System Memory:512 M	Encryption WPA2PSK-AES
CPU Usage:22%	Channel Number 149
Memory Usage:20%	

P6: Device Status

3rd: Quickly Configure CPE

1) Gateway Mode configuration

A. Login the Web management page, click "Gateway Mode", then you can start configure "Gateway Mode"



High-performance OutDoor 300M AP/CPE

P7 Gateway Mode

WAN Access Type: Dynamic IP or PPPOE(ADSL)

a).Dynamic IP:

①. If your access type is Dynamic IP, then you can get the IP address from the ISP. It means you only need connect the ISP line with internet to the router's WAN port, needn't configure.

2. Wireless Basic Settings

SSID:Wireless LAN status authentication name ,User can access the wireless networking through status authentication name only.

Channel:Choose a channel which few users use, it is clear and better. Can use Intelligent Analysis to choose the best channel.

Key: Wi-Fi password, default password is :66666666

b).PPPOE(ADSL)

If your access type is PPPoE, with ADSL virtual dialing, you need to fill in following details: User Name: Fill in ADSL access user name which supply by ISP, if you not sure can check with ISP.

Password: Fill in ADSL access password which supply by ISP, if you not sure can check with ISP.

2) Repeater Mode configuration

A. Login the Web management page, click "Repeater Mode", then "Scan AP"

Quick Setup		
Device Status		
Gateway Mode	Terminal	
(()) Repeater Mode		Repeater Mode(Basic structure of the network graph)
	Wireless Repeater	
AP Mode	SSID	WirelessAP ScanAP
	MAC	
(ICS) WISP	Channel	149
	Authentication	WPA2-PSK V
Advanced Settings	Cipher Suite	O TKIP ● AES
	Key	66666666
CPU Frequency:535MHz		Apply Changes
System Memory:512 M		
CPU Usage:13%		
Memory Usage:19%		

P8 CPE Station Mode configuration

B. Click "Scan AP", pop up the picture of P9, Take WirelessAP 2 as example, choose wirelessAP 2 and click "Select AP" after "Refresh"







If your computer can't pop up the window of P9, pls check your IE explorer and see whether it is blocked already. And if this CPE can't scan any SSID, pls check if there are 5G wireless signal.

C. Input the AP's password in P10

Quick Setup Quick Setup Operation Gateway Mode	Terminal O Construction Constru	AP
((•)) Repeater Mode	Repeater Mode(Basic structure of the network graph)	
	Wireless Repeater	
🛜 AP Mode	SSID WirelessAP2 ScanAP	
	MAC 78:d3:8d:bf:cf:61 lockmac	
WISP	Channel 149	
Advanced Settings	Authentication WPA2-PSK V	
	Cipher Suite O TKIP AES	
	Key 66666666	
CPU Frequency:535MHz		Apply Change
System Memory:512 M		
CPU Usage:13%		
Memory Usage:19%		

P10: Password

D.Click "Apply Changes", the system will reboot again

3) AP Mode Configuration:

Choose "AP mode", outdoor CPE can work as a wireless access point in AP operation mode:

Set the SSID user required, then set it in right Authentication and input Key for outdoor CPE, then Apply Changes.

Terminal AP Switch
AP Mode(Basic structure of the network graph)
Location Information
AP Location
AP Name
Wireless Basic Settings
SSID WirelessAP
Channel 149 - 5745MHz V Intelligent Analysis
Authentication WPA2-PSK V
Cipher Suite TKIP ALS TKIP/AES
Key 66666666
Apply Changes

P11AP Operation Mode

SSID:Wireless LAN status authentication name ,User can access the wireless networking through status authentication name only.

Channel:Choose a channel which few users use, it is clear and better. Can use Intelligent Analysis to choose the best channel.

Key: Wi-Fi password, default password is :66666666

4) WISP Mode

Click "WISP" mode, outdoor CPE will work with WISP mode

Quick Setup			
Device Status		弯 [<u>o</u>
Gateway Mode			Internet
((•)) Repeater Mode		WISP(Basic structure of the netwo	rk graph)
	WAN Access Type		
🛜 AP Mode	WAN Access Type		
	PPPOE(ADSL)		
((C) WISP	User Name		
	Password		
Advanced Settings	WISP		
	SSID	WirelessAP ScanAP	
CPU Frequency:535MHz	MAC		
System Memory:512 M	Authentication	WPA2-PSK V	Channel 149
CPU Usage:13%	Cipher Suite		1
	Key	66666666	
Memory Usage:19%			Apply Change

P12 WISP Mode

WAN Access Type: Dynamic IP or PPPOE(ADSL), choose the right way.

a).Dynamic IP:

①. If your access type is Dynamic IP, then you can get the IP address from the ISP. It means you only need connect the ISP line with internet to the router's WAN port, needn't configure.

2. WISP

Then "Scan AP", choose the AP which do you want to link and select it

Take WirelessAP 2 as example, choose wirelessAP 2 and click "Select AP" after "Refresh"

Scar	AP	۲
R	tefresh	
all	WirelessAP 2 78:d3:8d:bf:cf:61 Channel:149 Band:5GHz(AN) Signal-28dBm Security(WPA2-PSK/AES)	
atl	5G 64:09:80:52:8b:55 Channel:149 Band:5GHz(AN) Signal-88dBm Gamma Security(WPA/WPA2-PSK/TKIP/AES)	

P13 Scan AP

Key: Input WirelessAP 2's password

b).PPPOE(ADSL)

If your access type is PPPoE, with ADSL virtual dialing, you need to fill in following details: User Name: Fill in ADSL access user name which supply by ISP, if you not sure can check with ISP. Password: Fill in ADSL access password which supply by ISP, if you not sure can check with ISP.

5) LAN Setting

Click "Advanced Setting", can check as p14

Quick Setup	
Device Status	
Gateway Mode	AP Internet
((•)) Repeater Mode	WISP(Basic structure of the network graph)
	WAN Access Type
🛜 AP Mode	WAN Access Type Dynamic IP V
	PPPOE(ADSL)
((C) WISP	User Name
	Password
Advanced Settings	WSP
	SSID WirelessAP ScanAP
CPU Frequency:535MHz	MAC Dockmac
System Memory:512 M	Authentication WPA2-PSK V Channel 149
CPU Usage:29%	Cipher Suite O TKIP O AES
	Key [66666666
Memory Usage:17%	Anniv Channes
	Appy Orlanges

P14 Advanced Settings

Click "Network Settings" \rightarrow " LAN Interface, P15 will be showed

IP address: it is CPE's management address. =

DHCP Sever, " Enaled", the default DHCP sever is Enabled, no need to change.

Quick Setup	System Status	Operation Mode	5.8GHz Wireless	Network Setting	Firewall Management		
LAN Interface	WAN Interface					English	~
LAN Interface Se	etup						
				IP Ad	ress 192 . 168 . 188 . 253		
				Subnet	Aask 255 . 255 . 255 . 0		
DHCP Server Set	tting						
				DHCP S	erver O Disabled		
				DHCP Client F	ange 192 . 168 . 188 . 2 - 192 . 168 . 188 . 252		
				Lease Time	(sec) 86400		
						Apply Ch	anges
Delete St	atic DHCP List				Add Refresh IP-MAC List		
					192.168.188.//::		
					192.168.188.2/74:D0:2B:B6:69:5E		
Max MAC Addre	ess counts : 32						

P 15 LAN Setting

After finish the LAN setting, user can check the LAN status from P16:

Quick Setup	System Status	Operation Mode	5.8GHz Wireless	Network Setting	Firewall	Management				
LAN Interface	WAN Interface						English	\sim		
LAN Interface Se	LAN Interface Setup									
				IP Ad	Idress 192	. 168 . 188 . 253				
				Subnet	Mask 255	. 255 . 255 . 0				
DHCP Server Se	etting									
				DHCP S	Server ODi	sabled				
				DHCP Client F	Range 192	. 168 . 188 . 2 - 192 . 168 . 188 . 252				
				Lease Time	e(sec) 8640	0				
							Apply Cha	anges		
Delete S	tatic DHCP List				Ad	d Refresh IP-MAC List				
					19	. 168 . 188				
					192	.168.188.2/74:D0:2B:B6:69:5E				
Max MAC Addr	ess counts : 32									

P16: LAN Status

6) Management

Time Zone Settings: User can choose the right time zone, then Apply

Quick Setup	System Status	Operation Mode	5.8GHz Wireless	Network Setting	Firewall	Management			
Time Zone Setti	ng Log Up	grade Firmware S	ave/Reload Settings	Password				English	~
Time Zone Setti	ng								
		Current	Time 2015-01-01 15	41:59 Sync with host					
	Time Zone Select (GMT+08:00)Beijing, Chongqing, Hong Kong, Urumqi 🗸								
			Enable I	NTP client update					
		NTP S	erver (192.5.41.	41 - North America	\sim				
			O 0.0.0.0	(Manual IF	o Setting)				
			After device ru	nning 1 🗸 days, Au	tomatic optimiz	ation system			
								Apply	Cancel



Log: Log info on outdoor CPE

Quick Setup	System Sta	atus Operation M	ode 5.8GHz Wireless	Network Setting	Firewall	Management					
Time Zone Settir	g Log	Upgrade Firmware	Save/Reload Settings	Password					[English	~
System Log											
		Remote	system log O Disabled	Enabled							
											Apply
											^
											\sim
										Refresh	Clear

Upgrade Firmware: Select the right firmware, then upgrade, after upgrade it, pls reset outdoor CPE and waiting for reboot.

Quick Setup	Syst	tem Sta	itus	Operation Mod	le 5.80	GHz Wireless	Network Se	etting	Firewall	Management					
Time Zone Setti	ng	Log	Upg	rade Firmware	Save/Re	eload Settings	Password							English	~
Upgrade Firmwa	ire														
	Firmware Version CPE880-SPI-2T2R-V1.1-V5.3-B20150626143002														
	Build Time 20150626143002														
	Select File Browse Upgrade														
🛛 🔔 Note: d	A Note: do not power off the device during the upload because it may crash the system!														

Save/Reload Settings: User can save or upload outdoor CPE's settings, then can reset or reboot outdoor CPE.

Time Zone Setting Log Upgrade Firmware Save/Reload Settings Password Save/Reload Settings	~
Save/Reload Settings	
Save Settings to File Save Settings	
Load Settings Trowse	
Reset Settings to Default Reset Settings	
System Reboot System Reboot	

Password: Set Administrator's Password, then Apply changes

Quick Setup	Syster	m Statu	us Operation Mo	de 5.8	GHz Wireless	Network Settin	ıg Firewall	Management		
Time Zone Setti	ng L	_og	Upgrade Firmware	Save/Re	eload Settings				English	~
Password Setup										
				User Name						
			Nev	v Password						
			Confirmed	d Password						
									Apply	Cancel

Advanced Setting: User can use more functions if required.

Quick Setup	System Status	Operation Mo	de 5	5.8GHz Wireless	Network Setting	Firewall	Management					
System Status	5.8GHz Wireles	s Status LAN	Status	WAN Status							English	~
WLAN Status												
		5.8GHz W	AN State	us AP(Enabled)								
		Ch	innel-Bar	nd 5GHz(AN) cl	5GHz(AN) channel149							
	SSID				WirelessAP (Broadcast)							
			BSS	D 78:D3:8D:C1:0	78:D3:8D:C1:C5:10							
			Encryptic	on WPA2-PSK	WPA2-PSK							
		M/	C Addres	ss 7A:D3:8D:C1:0	7A:D3:8D:C1:C5:10							
		Access Co	ntrol Mod	de Allow All								
Client Table												

7) PC setting

Set computer's TPC/IP as Obtain an IP address automatically, Obtain DNS server address automatically as

following picture showed. the computer will abtain the IP address from router or base station.

🕹 本地连接 Status	🕹 本地连接 Properties 🛛 🔹 🤶 🔀	Internet Protocol (TCP/IP) Properties
General Support	General Advanced	General Alternate Configuration
Connection	Connect using:	You can get IP settings assigned automatically if your network supports
Status: Duration:	Qualcomm Atheros AR8151 PCI-E Gig Configure	this capability. Utherwise, you need to ask your network administrator for the appropriate IP settings.
Speed:	This connection uses the following items:	Obtain an IP address automatically
	Client for Microsoft Networks	O Use the following IP address:
	File and Printer Sharing for Microsoft Networks	IP address:
	Therenet Protocol (TCP/IP)	Subnet mask:
Activity		Default gateway:
Ser	Install Uninstall Properties	
	Description	Obtain DNS server address automatically
Packets:	Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication	Use the following DNS server addresses:
T donois.	across diverse interconnected networks.	Preferred DNS server:
	Show icon in notification area when connected	Alternate DNS server:
	Notify me when this connection has limited or no connectivity	
Properties Disat		Advanced
	OK Cancel	

8) Trouble Shooting:

F 1 The Failure phenomenon and solution

Failure phenomenon	Solution
SYS Indicator off	Pls make sure the PoE module connection is right. POE Port connect with CPE, LAN port connect with computer
Can't land to CPE through Web page	Pls check the IP address of computer and CPE to see whether they are in same networking segment, The method is click "start"-"Run" input"cmd", ping 192.168.1.1 to test the CPE connectivity. Reset CPE and load it again: Pls make sure the IP address 192.168.1.1 is not occupied by other device in CPE's networking; Check computer and cable problem, recommend to use 10/100M UTP unshielded cable; Clean up Arp binding from "Start"-"Run" input"cmd" arp –d Clean the IE Brower's temporary files and Cache file。
CPE can't connect with AP (the status display unconnected)	Try to scan the avaliable wireless networking again; Make sure the CPE's wireless standard (11b/g/n, 5.8G) is correct; The Security and passwords are matched between CPE and AP; The signal strength of AP is too weak to connect, should be more than -75dBm;
Can't scan the wireless AP	Scan it several times more; Make sure there are 5G signal existed. Reset the CPE, scan it again after CPE restart;
The connection of CPE and AP is success, but the computer can't share	Pls Check the computer's IP address and DNS setting. If it is dynamin, set the network card as automatically obtain. If it is static

internet	IP, pls contact with ISP for correct IP address and DNS address.
How to Reset CPE	Press the "Reset" button more than 15 seconds after power on. The CPE will restore factory default after the CPE restart.