

We Connect the World





WLO-12410N

IEEE802.11n 2.4GHz 2T2R 300Mbps MIMO Wireless Outdoor Bridge / Wireless Backhaul, (800mW, 10dBi Directional Antenna Integrated, 2 x Ethernet)



PheeNet WLO-12410N is an IEEE802.11bgn 2.4GHz 2T2R 300Mbps MIMO Wireless Outdoor Bridge / AP, which has 10dBi Sector Antenna integrated and 2 LAN Ports (1 for LAN POE In, and another for LAN POE Pass-Through to another POE device). With WLO-12410N's LAN POE Pass-Through port, 1 POE source can power on both WLO-12410N and another POE device, like POE IP Camera or POE AP, etc.

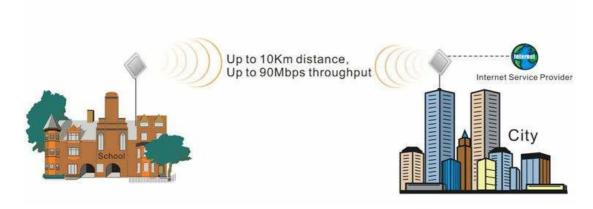
WLO-12410N supports rich operation modes, like Router AP, WDS, AP, CPE + Universal Repeater, and Client Bridge + Universal Repeater. You can use WLO-12410N as a standalone AP to service 2.4GHz Wifi users; WDS mode to build up Point-to-Point or Point-to-Multiple-Point Bridge; Router AP mode to use WLO-12410N as a Router and Wifi AP. Because of rich operation mode support, it provides the installer more flexible deployments depends on demands.

If you use WLO-12410N as a Wireless Hotspot Outdoor AP, you also can add PheeNet Network Access Control Gateway WMS-308N to have WLO-12410N AP management, and smart Wifi user management.

Equips with robust Die Cast Housing and IP68 rated waterproof, WLO-12410N extremely satisfy WISP, Telecom Operator, System Integrator, Hotspot, SMB/Enterprise demands on any kind of Outdoor Wireless applications.

Application

WDS:



AP-CPE:



Features

General Features

- ■IEEE 802.11n draft 2.0 compliance in 2Tx/2Rx design
- ■Support IEEE 802.11b, g, n
- ■Operates in the 2.4GHz ISM band
- ■Enables bandwidth of up to 300Mbps(Tx), 300Mbps (Rx) link rate
- ■Over load current protection
- ■Wide Range Voltage support (12-68VDC)
- ■Integrated Power over Ethernet (PoE)

Wireless Features

- ■Number of ESSID (Virtual AP): 7
- ■Number of associated clients per AP: 32
- ■Setting for max number associated clients
- ■Number of Max. WDS Setting: 4
- ■Setting for transmission speed, Dynamic Wireless Re-transmission
- Channel Selection: Manual or Auto
- ■Transmission Power Control: 1~100%
- ■IEEE802.11h TPC and DFS
- ■IEEE802.11d Multi country roaming
- Channel Bandwidth Setting: 20MHz or 20/40MHz
- **■**Wireless Site Survey
- ■IEEE802.11f IAPP: to facilitable faster roaming for the stations among different APs nearby
- ■IEEE 802.11i Preauth (PMKSA Cache)
- ■HT Tx/Rx Stream selection : 1 or 2
- A-MSDU and A-MPDU support
- ■Maximal MPDU density for TX aggregation setting
- ■Short Slot support
- ■RTS Threshold and Fragment Threshold support

Networking

- Support Static IP, Dynamic IP(DHCP Client) and PPPoE on WAN Connection
- ■Support VPN Pass Through (PPTP, IPSec, L2TP)
- ■PPPoE Reconnect : Always on, On demand, Manual
- **■**MAC Cloning
- ■DHCP Server (for CPE mode and Client Bridge mode)
- ■802.3 Bridging
- Masguerading (NAT) (for CPE Mode)

- ■Proxy DNS
- **■**Dynamic DNS
- ■NTP Client
- ■Virtual DMZ
- Virtual Server (Port Forwarding)
- ■Support MAC Filter
- ■Support IP Filter
- ■Bandwidth traffic Shaping

Wireless Security

- Layer 2 User Isolation
- ■Layer 2 AP Isolation
- ■Blocks client to client discovery within a specified VLAN
- ■WEP 64/ 128 Bits
- ■EAP-TLS + Dynamic WEP
- ■EAP-TTLS + Dynamic WEP
- ■PEAP/ MS-PEAP + Dynamic WEP
- ■WPA (PSK +TKIP)
- ■WPA (802.1x certification + TKIP)
- ■802.11i WPA2 (PSK + CCMP/ AES)
- ■802.11i WPA2 (802.1x certification + CCMP/ AES)
- Setting for TKIP/ CCMP/ AES key's refreshing period
- Hidden ESSID support
- ■Setting for "Deny ANY "connection request
- ■MAC Address filtering (MAC ACL)
- ■No. of registered RADIUS servers: 1
- ■VLAN assignment on BSSID
- Support WEP, AES and TKIP data encryption over WDS link

Quality of Service

- ■Download and Upload traffic control
- Packet classifications via DSCP (Differentiated Services Code Point)
- Control Policy by IP/IP Ranges/ MAC/ Service
- ■Layer-7 Protocol Support
- Traffic Analysis and Statistics
- ■No. of Max. Policy setting: 10
- DiffServ/ TOS
- ■IEEE802.11p/ COS
- ■IEEE 802.11Q Tag VLAN priority control
- ■IEEE802.11e WMM

Management

- ■Web-Based management & firmware upgrade
- Reset to factory default
- Profile Configuration Backup and Restore
- Remote Link Test Display connect statistics
- ■Full Statistics and Status Reporting
- ■NTP Time Synchronization

- Event Log
 Support SNMP v1, v2c, v3, MIBII
 SNMP Traps to a list of IP address
- ■CLI access via Telnet and SSH
- ■Administrative Access: HTTP and HTTPS
- ■UPnP (Universal Plug and Play) ■Can be managed by WMS-308N, WSW-1808A

Specification

Wireless	
Standard	IEEE 802.11b/g/n IEEE 802.3u 100Base-TX Fast Ethernet
Frequency Band	2.412 ~ 2.462GHz (USA) 2.412 ~ 2.484GHz (Japan) 2.412 ~ 2.472 GHz (Europe ETSI) 2.457 ~ 2.462 GHz (Spain) 2.457 ~ 2.472 GHz (France)
Channel Spacing	IEEE802.11b/g: 20MHz IEEE802.11n: 20/40MHz
Modulation	IEEE802.11b: DSSS (DBPK, DQPSK, CCK) IEEE802.11g/n: OFDM (64QAM, 16QAM, QPSK, BPSK)
Data Rate	IEEE802.11b: 1/2/5.5/11Mbps(auto sensing) IEEE802.11g/n: 6/9/12/18/24/36/48/54/150/300Mbps
Security	WEP (64/128Bit) WPA / WPA2 Hidden ESSID User Isolation AP Isolation MAC Address Filter
Receive Sensitivity	-97dBm
Output Power	800mW
Operating Mode	AP mode (AP +WDS) WDS Mode (PTP, PTMP, Repeater) CPE Mode (Router Client) Universal Repeater + Client Bridge

Hardware	
Processor	Atheros AR9341 – 400MHz MIPS CPU
Flash	8MB
SDRAM	32MB
LED Indication	Power/LAN, Power/WAN ,Wireless
Ethernet	10/100BASE-TX auto-negotiationEthernet port x 2 (RJ-45 connector)Power over Ethernet
Antenna	10dBi Directional Antenna (H60, E60)
Environment	Operating Temperature: -20 °C ~ 60 °C Storage Temperature: -20 °C ~ 85 °C Humidity: 100%(non condensing)
Power Supply	DC Input : 12V POE : 48 VDC, 0.4A input (POE Injector)
Power Consumption	9W
Material	Aluminum Alloy Housing, W/ IP68 Rated Waterproof
Dimensions	157 (L) x 96 (W) x 45 (H) mm

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