

Enterprise Wireless Solution

Datasheet

High performance
outdoor AP / CPE

with Advanced Algorithm and Premium
Quality Integrated High Gain Antenna.

plut  **Power**



Pluto power is a high-performance wireless mesh routing device designed SPECIALLY for the most challenging and Harsh Environments where wired connectivity is impractical or unavailable.



plut^o Power

- QoS** with Traffic Shaping
- Premium Quality High Gain Antenna**
- 150/300 Mbps**
- Rust Free Aluminum Mounting**

Range

- Point to point Link 20KM* (Internal)
- Point to point Link 40KM* (External)
- Point to Multi-point Link - 5km

Edge

Pluto series enhances enterprise level performance, management and quality of services with very high performance.

The perfect combination of enterprise grade mesh OS along with premium quality high gain antenna and robust IP67 enclosure makes pluto the first choice for people who deserve unparalleled speed, Link Reliability, low latency and seamless hand-off for voice, HD-quality video and other real-time applications across long-distance outdoor wireless Point to Point and Multipoint to MultiPoint Networks.

Pluto power is ideal for deployment in metropolitan and industrial areas like oilfields, mines, shipping ports, WISP, Education campus etc..

Pluto power offers wide choice of integrated antenna for flexible outdoor wireless deployments using the 2.199 – 2.499 GHz or 4.9GHz- 6.1Ghz frequency band including 2.4GHz and 5.8GHz ISM band.

The device can be configured as AP /Client / Client Bridge / Mesh Repeater for Wi-Fi Applications or as a Point-to-Point, Point-to-Multipoint and full mesh backhaul.

Intelligent wireless mesh routing

Integrated OTAi mesh OS, adaptive wireless routing technology supported by Spanning Tree Protocol automatically optimizes traffic routes between wireless mesh routers and creates a truly adaptive mesh infrastructure. The mesh infrastructure adjusts dynamically to traffic levels and RF signal strength to ensure high availability and optimal performance.

Seamless mobility

Advanced algorithm of quick RF routing and bridging capabilities of OTAi software allows Wi-Fi clients to move between wireless mesh routers in very less time (within threshold time) maintaining a seamless connection for latency-sensitive applications, such as video and voice.

Pluto power has wide area of application for transporting VOICE, DATA and VIDEO over long distances.

HD-quality video

Full scale user friendly QoS with traffic shaping presets, HD-quality video from mobile and fixed surveillance cameras, monitors and recording systems can be easily transported over wireless network on real time basis, (approx : mately 30 frames per second)

Advanced Network Features

Other Advance network features included VLAN Tagging, Firewall, NAT, QoS and Bandwidth Management. The advance routing offers operating modes like Gateway/BGP/ RIP2 & OSLR. (PPTP, L2TP, PPPoE) Server/Client & STATIC IP routing options

Key Features

- Premium Quality Very High Gain Antenna
- High TX Power
- Long Range upto 40Kms*
- OFDM MIMO Technology
- MESH Ready
- OSLR & Static Routing
- Full QoS With Traffic Shapping
- 256bit Ultra Secure Encryption
- GUI, Telnet, SSH
- Watchdog Timer
- Built-in HotSpot Clients
(Sputnik / Chilli Spots / HotSpot System)
Plus PPPoE Server / Client
- Point to Point, Point to Multipoint &
Any Point to Any Point

*(Depending on Antenna and Quality of installation)



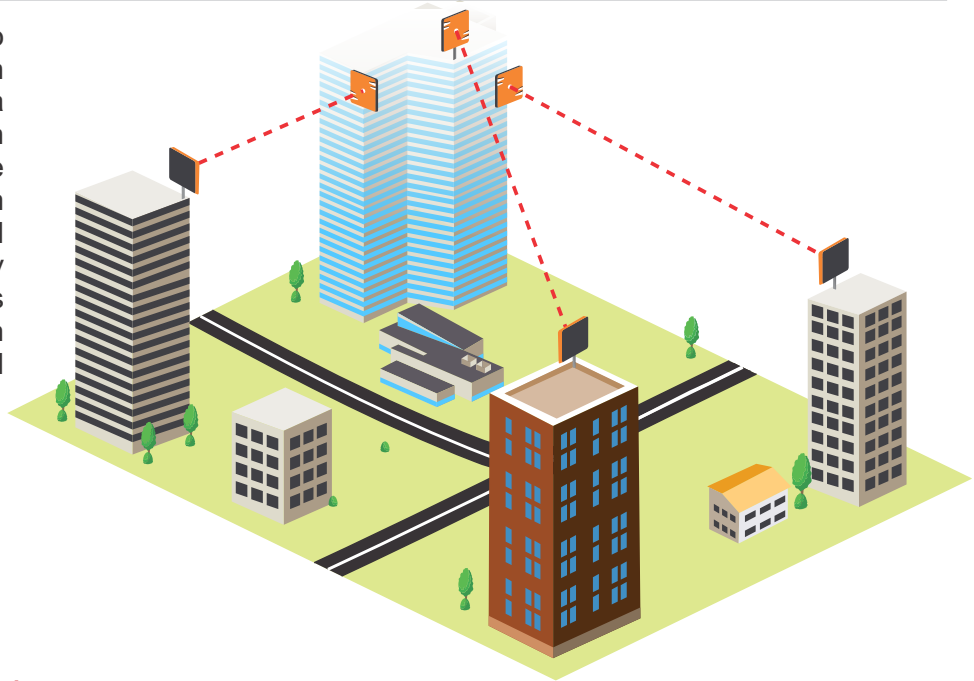
Pole Mounted



Applications

Point to Point Link

Two Pluto can be bridged as Point to Point wireless link up to 20 Kms with high performance integrated antenna and up to 40 KM with external high gain antenna. Pluto's adaptive modulation and advanced algorithm ensures very high performance and stable wireless connectivity with very low latency. Reduced Overheads ensures high TCP/IP throughput even when installed in frequency polluted zone.



Point to Multipoint Link / Mini BTS & CPE

Pluto can be used as low cost base station (AP Mode) with the help of omni antenna or directional wide angle sector antenna and CPE node with its integrated high gain antenna.

Up to 32 wireless CPE can be easily connected to MINI BTS which makes it the ideal choice for wireless surveillance applications and low density WISP applications.

High transmission power and quality integrated high gain antenna allows very strong Point to Multipoint Network for minimum 5 KM Radius



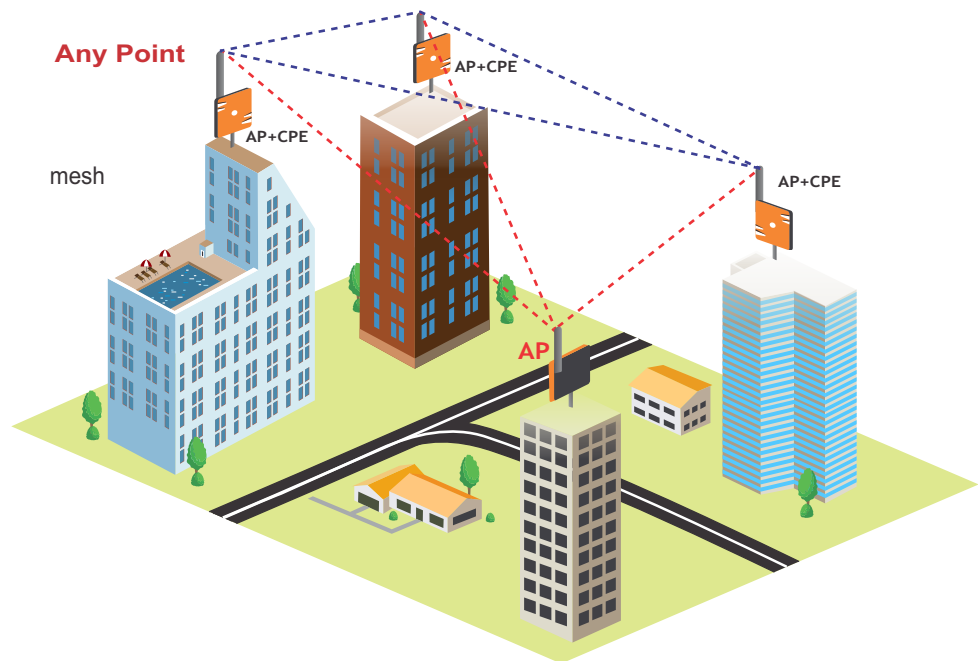
Applications

Multi Point to Multi Point / Any Point to Any Point Mesh network

Pluto can create very cost effective, self healing single channel wireless mesh network with omni antenna for fixed and mobile applications of voice, data and video.

Pluto's Any Point to Any Point mesh network is very useful for Wi-Fi coverage for Hotels / Campus / Golf-clubs / Resorts / Sports Stadium / Airports etc

WISP can make very effective use of this feature and create wide coverage for connectivity to multiple CPE. Only one AP is connected to backhaul.

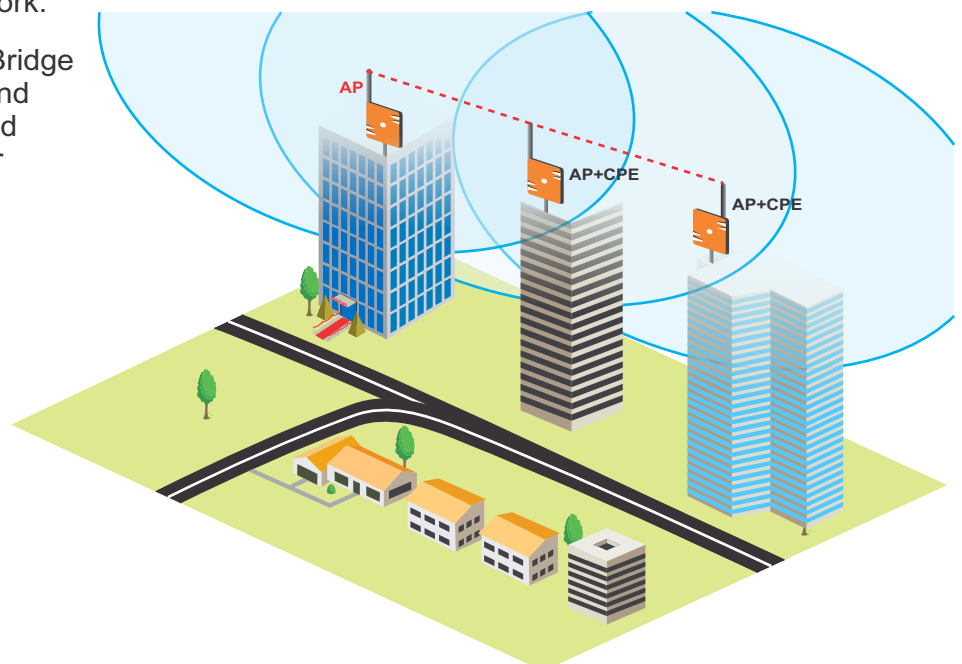


Range Extender

Pluto can also be deployed to cover the DEAD SPOT of existing coverage in congestion with any standard existing access Point.

In case of special requirements to provide wireless connectivity to very large users group concurrently where most of the AP / Routers Fail such situation resulting in unstable wireless network, Pluto can be installed as wireless repeater to the existing network.

The device gets connected in Client Bridge mode to any AP on Same Channel and also act as VAP with same SSID and PW. Multiple Pluto can also be further connected in Mesh if required to first repeater Pluto.



Specifications

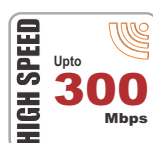
Model	Pluto Power
Chipset	Atheros AR7240 (400 MHz) Network Processor
Flash	8M
SDRAM	32M
Frequency Band	<ul style="list-style-type: none"> • 2.400 GHz (ISM BAND) • 5.800 GHz (ISM BAND) • 2.199 GHz - 2.499GHz (Extended Frequency Band) • 4.900 GHz - 6.100 GHz (Extended Frequency Band)
Tx Power	26dBm \pm 2 , Adjustable.

Interfaces	
Data	1 x 10/100BaseT Ethernet Port Auto MDI/MDIX,
Optional	Additional 1 x 10/100 Base T Ethernet Port
Power (PoE) Standard	12V - 24V Passive PoE , RJ 45 Power Pins : 4,5(+ve) & 7,8 (-ve)
Optional	80.2 3af / at Complied
Power	14W (Max consumption)
Watchdog Timer	Software / Hardware / Temperature
Wireless Users	Max : 254 Recommended: 64

Operation Mode	AP, Client, Client Bridge, WDS Station, WDS AP , MESH Repeater
Standards	802.11a/n or b/g/n access point for Client access or CPE 802.11a/n or b/g/n mesh router for backhaul Ethernet: IEEE 802.3/u (10/100BaseT)
Data Modulation	BPSK, QPSK, CCK & QAM 64 (OFDM)
Data Rate	A) 1T 1R, 150 Mbps Max B) 2T 2R, 300Mbps Max
802.11n (HT) High-Throughput	HT 20/40

Router Specifications	Basic Network Platform TCP/IP protocol suite
Networking	NAT/PAT, DHCP server, relay, client, VLANs Support for HTTP, HTTPS, SSH, Telnet, SNMP V2 (Read Only Excess), NTP Server & Client
Security	64/128/ 256 bit WEP, WPA, WPA2,RADIUS and 802.1x encryption Mode For Wireless Network MAC and IP address filtering, Access control list
Band Width Management	Per IP/protocol/subnet/port, CBQ, RED, SFQ, byte limited queue, packet limited queue
Tunnels	PPTP, EoIP (Ethernet over IP) Multicasting support (beta available)
Bridge n g:	Spanning tree protocol, multiple bridge interfaces, bridge firewall
QoS	Full Scale QOS with traffic shaping and user friendly Presets .
DNS Client / Server	Name resolving for local use, Dynamic DNS Client
Multiple SSID	Offers Virtual AP support with multiple SSID & individual encryption and IP address/DHCP
HotSpot	Built-in HotSpot Clients (Sputnik / Chilli Spots / HotSpot System) Plus PPPoE Server / Client

Operating Temperature	(-40°)C - (70°)C
Storage	(20°)% - (90°)%
Humidity	5%~98% non-condensing
Weather Rating	IP 67
Wind Survivability	Up to 165 mph
Mounting	Mast /Pole mounting (Aluminum , Light Weight, non-corrosive)





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