

Pluto Power Series

Carrier Grade Outdoor AP/CPE



Premium quality infrastructure wireless solution
for mission critical business applications of

WISP | SMB | Public Safety Authorities | Government | Semi Government
Municipalities | Education Campus | Oil Field | Construction Companies
Hotels | Hospitals | Golf Club etc.

Reliability

Stability

Scalability

OTAi's mission is to design the world's most innovative products that provide an always-on reliable wireless infrastructure for voice, data & video traffic are impervious to interference in harsh environmental conditions.

Established in 2012, OTAi has recorded remarkable growth in a very small span of time and installed more than 2000 wireless devices meeting customers need of advanced features, high throughput and very low latency sustaining the most harsh environmental conditions of Middle East.

Pluto power enjoys distinctive edge of superior enterprise operating system with less overheads and rate set algorithm supported by wide choice of premium quality integrated antenna, robust enclosure and industrial grade advanced hardware.



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.

Frequency Options

- 2.3-2.7GHZ
- 2.4-2.5GHZ
- 4.9-6.1GHZ
- 5.1-5.10GHZ
- 3.3-3.8GHZ
- 5.9-6.4GHZ

Data Port Options

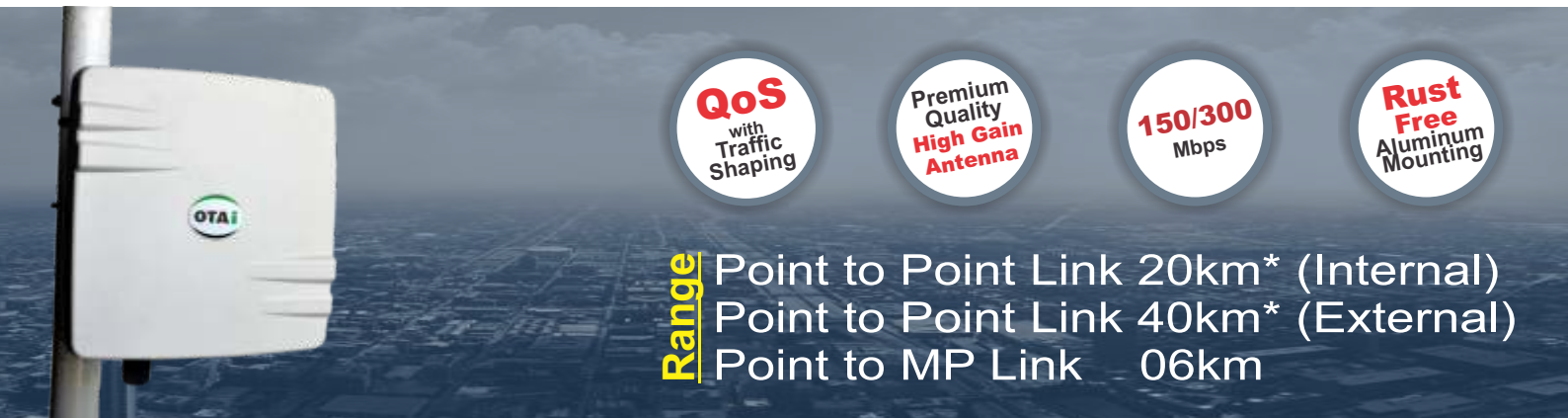
- 1xPoE Uplink
- Redundant PoE Uplink
- Redundant Data Port
- 3af/at PoE Out Port
- PoE⁺ Out Port

Antenna Options

- Single Polarized - 12,14,16,19,21,23 dBi
- Dual Polarized - 12,16,18,21 dBi
- Triple Polarized - 16,18dBi
- Dual Polarized - 14,16dBi (120°Wide Angle)



Wide choice of Premium Quality Integrated Antennas allow you to select the best suitable model for actual deployments. This unique advantage makes Pluto the most cost effective & high performance product in wireless industry.



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 Multi-Point Networks.

Pluto power is ideal for deployment in metropolitan and industrial areas like oil fields, 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 (with in threshold time) maintaining a seamless connection for latency-sensitive applications, such as video and voice.

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.

Pluto Power Series

Choose Your **Option** Smartly

Pluto Fix

Factory programed, Professional Point to Point Link
(A pack of AP & Station, just Plug & Play)
Best choice of outdoor link upto 3km

Pluto Bridge

Factory programed, high performance, Access Point for
Point to Point Bridge upto 20km with Integrated Antenna.

Pluto Station

Factory programed, high performance, Station/CPE for
long distance Point to Point and Point to Multi-Point
connectivity (Can be connected to any AP. Best pair with
Pluto Bridge, Pluto Fisheye, Pluto Duo, OTAi Airmax)

Pluto Fisheye

Enterprise Grade wireless device specially designed with
Integrated WIDE-ANGLE Panel Antenna to offer wide area
of coverage for Point to Multi-Point applications without the
use of expensive Sector Antenna.

Pluto Vision

Enterprise Grade wireless device specially designed for
video surveillance projects. It has 3af / at / PoE⁺ outports for
direct connectivity Power & Data to any PoE device like
IP Cam / IP Phone etc.

Pluto Duo

Professional Range Extender for long range operation.
Dual band Dual Concurrent connectivity from single housing.
Best for backhaul on one port and Wi-Fi on another port.
Create remote Wi-Fi zone @10km away from main unit

Pluto Flex

Enterprise grade high performance device with external
antenna connectivity 2xN(F) for very long distance
upto 40km Point to Point Link and OMNI / Sector antenna
for Point to Multi-Point Network



Enterprise Point to Point Wireless Bridge

150/300
Mbps

pluto Fix

Factory Programmed, Short Range Point to Point Bridge

Integrated Premium Quality
Wide Angle MIMO
Antenna

Carrier Grade Operating System



Frequency

- 2.4 - 2.485 GHz
- 2.3-2.7 GHz
- 5.1-5.885 GHz
- 4.9-6.1 GHz

Features

- Industry's Lowest Latency
- TX Power 28 \pm 1 dBm
- PoE Out Port
- Redundant Data Port
- Maximum Link Distance upto 5km
- Best Link Performance upto 3km

Enterprise Point to Point Wireless Bridge

150/300
Mbps

upto

20 Km* Point to Point Link

06 Km* Point to Multi-point Link

Features

- Premium Quality High Gain Antenna
- High TX Power
- OFDM MIMO Technology
- MESH Ready
- 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

Integrated Antenna Options (5GHz) :

Single Polarized : 16 / 19 / 21 / 23dBi

Dual Polarized : 16 / 18 / 21 dBi

pluto
Bridge



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

*Depending on Antenna used.

Professional Outdoor CPE (Station)

150/300
Mbps

upto

20 Km* Point to Point Link

06 Km* Point to Multi-point Link

plut 
Station

Features

- Premium Quality High Gain Antenna
- High TX Power
- OFDM MIMO Technology
- MESH Ready
- 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



Integrated Antenna Options (5GHz) :

Single Polarized : 16 / 19 / 21 / 23dBi

Dual Polarized : 16 / 18 / 21 dBi

A high-performance Customer Premises Equipment (CPE) designed specially for Point to Multipoint outdoor applications where wired connectivity is impractical or unavailable.

*Depending on Antenna used.

No More Sector Antenna for **Wide Angle** Coverage

300
Mbps

Long Range

Point to Multi-Point Solution
120° Wide Angle Integrated Antenna

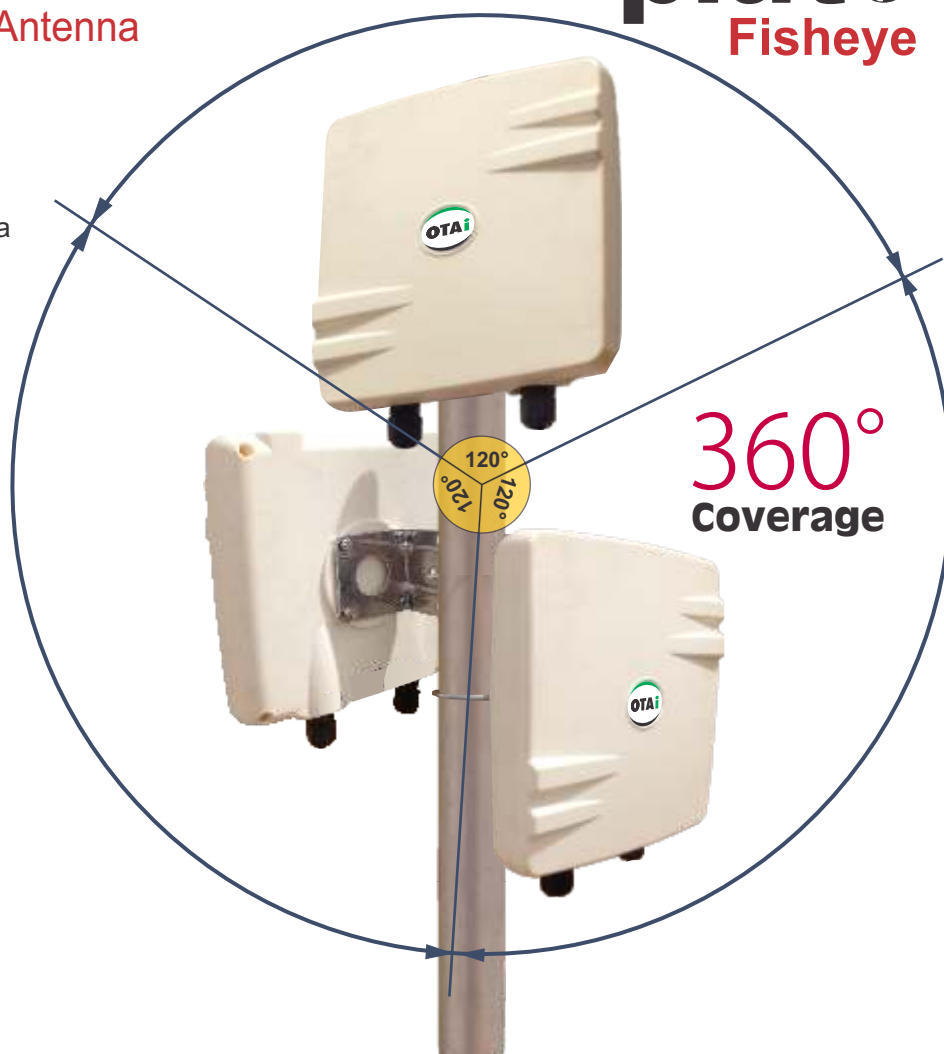
pluto 
Fisheye

Key Features

- Wide Angle Integrated Panel Antenna
- High TX power (26dBm)
- OFDM MIMO, MESH Ready
- OSLR & Static Routing
- Full QoS With Traffic Shapping
- 256bit Ultra Secure Encryption
- GUI, Telnet, SSH
- Watchdog Timer
- PPPoE Server / Client

- PoE Ready, 3af PoE (Optional)
- Redundant Data Port (Optional)
- 3af PoE Out Port (Optional)

- Built-in HotSpot Clients
(Sputnik / Chilli Spots / HotSpot System)



Best choice for wireless **Internet Service Providers** and **outdoor video surveillance** projects.

Pluto Fisheye has wide area of application for transporting Voice, Data and Video over long distances for Outdoor surveillance Projects, Oilfields, Mines, Shipping & Ports, WISP, Education Campus, Construction Sites, etc.

Outdoor Video Surveillance Redefined

150/300
Mbps

High Performance

Outdoor AP/CPE with PoE out ports

pluto
Vision

Choice of PoE out ports

- a) Passive PoE (12-48V) (60W)
- b) 3af PoE with detection (15.4W)
- c) 3at PoE with detection (24.0W)
- d) PoE+ for PTZ IP camera (60.0W)

Key Features

- High TX Power (26dBm)
- Direct DC Power (12-48 V) (optional)
- Integrated Solar Powered (optional)

Integrated Antenna Options (5GHz) :

Single Polarized : 16 / 19 / 21 / 23dBi
Dual Polarized : 16 / 18 / 21 dBi



upto **3 PoE** out ports

Pluto Vision is a revolutionary product designed to address growing need of outdoor Video Surveillance requirements. One stop solution eliminates multiple network components and simplifies outdoor deployments of Surveillance cameras which makes the projects very cost effective.

Range Extender / Repeater for Enterprise and Carriers

300+300
Mbps

Dual Radio Solution

Radio 1 - CPE with integrated antenna (5GHz)

Radio 2 - AP with external antenna option (2.4 / 5GHz)

pluto 
Duo
(802.11an + 802.11an/bgn)

Key Features

- STP Enable for Seamless Integration
- PoE cascading
- 12-24V Passive PoE
- 3af complied PoE (optional)

Applications

- P-P / Backhaul on port-1 and P-MP using OMNI or Sector Antenna
- 2 x P-P Link

Expand
Your Network Anywhere



Pluto Duo is an Enterprise Wireless device designed to offer Dual Band Dual Concurrent RF Connectivity for low & medium traffic and long distance Point to Point and Point to Multi-Point Applications for Enterprise users and operators.

Long Range

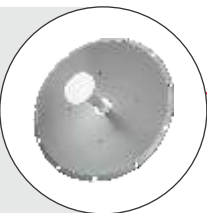
Point to Point & Point to Multi-Point Network

300 Mbps

upto **40 Km*** Point to Point Link

06 Km* Point to Multi-point Link

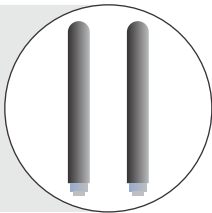
Long Range AP/CPE Point to Point Connectivity (upto 40km) with Dish Antenna.



Base Station (360°) with 12dBi OMNI MIMO Antenna.



Base Station (360°) with 2xSingle Polarized High Gain Antenna of H & V Plane

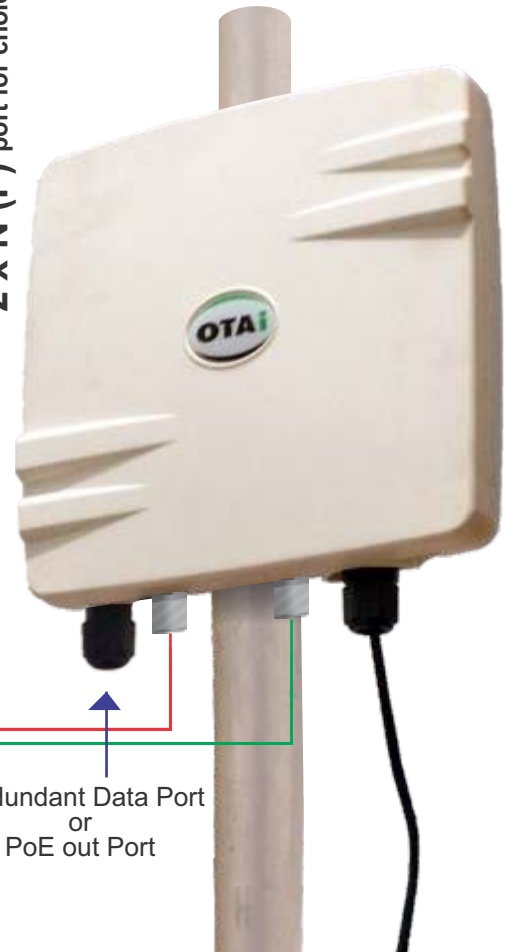


Base Station Directional (120°) with Dual Polarized Sector Antenna.



2 x N (F) port for choice of Antenna

pluto 
Flex



Redundant Data Port or PoE out Port

Key Features

- High TX Power
- Full QoS With Traffic Shapping
- OFDM MIMO Technology
- 256bit Ultra Secure Encryption
- MESH Ready

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

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 - 2.485 GHz (ISM BAND) • 5.100 - 5.885 GHz (ISM BAND) • 2.199 - 2.499 GHz (Extended Frequency Band) • 4.900 - 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 B)2T 2R, 300 Mbps
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)
Bridging:	Spanning Tree Protocol (STP), Multiple Bridging 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 / Chillli Spots / HotSpot System) 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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THE TECHNOLOGY XPERT

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