

ATLAS SERIES Product Family Description

Broadband Wireless Access Radio Licensed Band Outdoor Solutions with external antenna

ATLAS_PFD_ENB01W

Applications

- Long distances P-T-P or P-T-MP Bridge (CPE)
- Monitoring of remote systems
- Sensor data capture in embedded systems
- Home automation & building control
- SCADA (supervisory control & data Acquisition)
- Dedicated ISP connections for high-reliability subscribers
- Enterprises or Institutions LAN and PBX extension



ATLAS SERIES

Product Family Description

Broadband Wireless Access Radio Licensed Band Outdoor Solutions with external antenna

The ATLAS Series by LanPro is an ideal solution for Broadband wireless access. The support of various frequencies from 400MHz~6GHz, including the licensed band for Wimax or customized frequencies. That flexibility provides the customer more options besides the crowded ISM band. The use of an external antenna adds to this flexibility, enabling the user to adapt the antenna to the application.

The fractional bandwidth control feature (5/10/20MHz adjustable via software) allows more non-overlapping channels in a practical deployment, providing better flexibility in deploying the network.

High output power OFDM/TDD technology supports better performance for near-line of sight deployment, and the unique regatta mode enhances the throughput of the radio up to 25~35%.

Supports WEP 64 / 128 / 152 bits, 802.1x Authentication (EAP), MAC address filtering, disable broadcast the SSID, client isolation and WPA-PSK / WPA(TKIP) / WPA2(AES-128bits) encryption. All these functions make the network much more secure and reliable.

A Product Highlights

• Effective spectrum utility

The LanPro ATLAS series support fractional bandwidth control. There are 3 channel bandwidths (5, 10 and 20MHz) adjustable via software, that provide better flexibility in deploying the network.

• Regatta mode increases performance up to 35%

Unique regatta mode enhances the throughput of the radio up to 25~35%

• Versatile Quality of Service / Time-Division Multiplexing technique

TDM tech can avoid packet collision and send packets more efficiently and in a stable manner to improve voice quality and data transmission. Throughput of the radio can be set in fractional (nx64 Kbps).

• High output power OFDM technology and external antenna design

External antenna with high output power OFDM technology provides best flexibility and lowest price, and at the same time makes the ATLAS series the most cost effective solution in the WLAN outdoor radio market.

• Security

WEP 64 / 128 / 152 bits, 802.1x Authentication (EAP), MAC access control, disable broadcast the SSID, client isolation, WPA-PSK, WPA-TKIP encryption and WPA2 (AES-128bits) build the highest security mechanism to prevent malicious attacks from the internet.

• Antenna Alignment (Audible antenna alignment for optional)

The site survey function provides the RSSI (signal strength) info to indicate the status of antenna alignment. Customer can order the audible antenna alignment model. Just align the antenna with the sound heard through the headphone of your mp3 player, easy and simple.

B Specifications

RADIO					
Model No.	LP-A0405A	LP-A0707A	LP-A0909A	LP-A2324A	LP-A2729A
Frequency Range	450-510MHz	760-780MHz	902-928MHz	2302-2482MHz	2700-2900MHz
OUTPUT POWER / RX SENSITIVITY (Packet Error rate :10%) External antenna versions					
64QAM (54Mbps)	33(±1.5) / -90 (dBm)	22(±1.5) / -72(dBm)	20(±1.5) / -72(dBm)	20(±1.5) / -72(dBm)	18(±1.5) / -73 (dBm)
16QAM (36Mbps)	33(±1.5) / -98 (dBm)	24(±1.5) / -81(dBm)	22(±1.5) / -81(dBm)	22(±1.5) / -78 (dBm)	21(±1.5) / -81 (dBm)
BPSK (18Mbps)	36(±1.5)/-101 (dBm)	26(±1.5) / -88(dBm)	25(±1.5) / -88(dBm)	23(±1.5) / -84(dBm)	25(±1.5) / -88 (dBm)
QPSK (6Mbps)	37(±1.5)/-103 (dBm)	26(±1.5) / -92(dBm)	25(±1.5) / -92(dBm)	23(±1.5) / -90(dBm)	25(±1.5) / -92 (dBm)
CCK(DSSS)	37(±1.5)/-103 (dBm)	26(±1.5) / -92 (dBm)	25(±1.5) / -92(dBm)	23(±1.5) / -90(dBm)	N/A

Model No.	LP-A3334A	LP-A3437A	LP-A4447A	LP-A4949A	LP-A5160A
Frequency Range	3300-3400MHz	3400-3700MHz	4475-4725MHz	4940-4990MHz	5150-6060
OUTPUT POWER / RX SENSITIVITY (Packet Error rate :10%) External antenna versions					
64QAM (54Mbps)	25(±1.5) / -77 (dBm)	18(±1.5) / -73 (dBm)	18(±1.5) / -73(dBm)	17(±1.5) / -72 (dBm)	18 (±1.5) / -72 (dBm)
16QAM (36Mbps)	27(±1.5) / -85 (dBm)	21(±1.5) / -81 (dBm)	22(±1.5) / -81(dBm)	19(±1.5) / -78 (dBm)	22(±1.5) / -78 (dBm)
QPSK (18Mbps)	28(±1.5) / -92 (dBm)	25(±1.5) / -88 (dBm)	24(±1.5) / -88(dBm)	21(±1.5) / -84 (dBm)	23(±1.5) / -84 (dBm)
BPSK (6Mbps)	28(±1.5) / -96 (dBm)	25(±1.5) / -92 (dBm)	24(±1.5) / -92(dBm)	21(±1.5) / -90 (dBm)	23(±1.5) / -90 (dBm)
CCK(DSSS)	28(±1.5) / -96 (dBm)	N/A	N/A	N/A	N/A
Modulation	OFDM / (DSSS)				
Duplex	TDD				
Channel Bandwidth	5 / 10 / 20 MHz				
Frequency Stability	±10ppm				
INTERFACES					
RF	N-Jack				
Ethernet	IEEE 802.3(10 Base-T) / IEEE 802.3u(100 Base-Tx)				
RSSI (Receive Signal Strength Indication)					
Bridge Mode	Connections Status				
CPE Mode	Site Survey				
Antenna Alignment	Audible Antenna Alignment (beeper)				
MANAGEABILITY					
Management and setup	Web-based configuration				
Operating mode	Peer to Peer (Bridge) / AP / CPE				
Network Architecture	PTP Bridge / PTMP Bridge / Repeater				
Operating System	Windows 98 / 2000 / NT / XP				
SNMP agents	MIB II				
Protocol	TCP/IP, IPX/SPX, NetBEUI				
QOS	Peer to Peer link speed limit/ CPE uplink speed limit				
DHCP support	DHCP Client				
Other Features	VLAN(IEEE 802.1Q)				
SECURITY					
Data Encryption	WEP (64/128/152 bits) / WPA-PSK / WPA-TKIP / WPA2 (AES 128bits)				
Authentication	802.1x Auth.(EAP)				
Authorization	MAC Access Control				
Advanced Security	Disable Broadcast SSID / Wireless Client Security Separation (Layer 2 Isolation)				
ENVIRONMENT					
Operating Temperature	-30~55°C: LP-A0707A / LP-A0909A / LP-A2324A / LP-A2729A / LP-A3437A / LP-A4447A/ LP-A4949A / LP-A5160A 0~55°C: LP-A0405A / LP-A3334A				
Storage Temperature	-30~70°C				
Humidity	95% non-condensing				
POWER					
Power Supply	AC 100-264V, DC 24 V, 50-60Hz				
PHYSICAL					
Dimensions	259 (L) * 250 (W) *75 (H) ; mm				
Weight	1.8Kg: LP-A0707A / LP-A0909A / LP-A2324A / LP-A2729A / LP-A3437A / LP-A4447A/ LP-A4949A / LP-A5160A 2.5Kg: LP-A0405A / LP-A3334A				
WARRANTY					
Validity	2 Years				

C How to order

- LP-A0303a 336MHz - 386MHz, 5W OFDM Ethernet Radio
- LP-A0405a 450MHz - 510MHz, 5W OFDM Ethernet Radio
- LP-A0707a 760MHz - 780MHz, 800mW OFDM Ethernet industrial Radio
- LP-A0909a 902MHz - 928MHz ISM Band, 600mW OFDM Ethernet Radio
- LP-A2324a 2302MHz - 2482MHz Band. 200mW OFDM Ethernet Radio
- LP-A2527a 2550MHz - 2700MHz, 800mW OFDM Ethernet Radio
- LP-A2729a 2700MHz - 2900MHz, 300mW OFDM Ethernet Radio
- LP-A3334a 3300MHz - 3400MHz, 500mW OFDM Ethernet Radio
- LP-A3437a 3400MHz - 3700MHz, 300mW OFDM Ethernet Radio
- LP-A4447a 4475MHz - 4725MHz, 300mW OFDM Ethernet Radio
- LP-A4949a 4940MHz - 4990MHz, 100mW OFDM Ethernet Radio
- LP-A5160a 5150MHz - 6060MHz, 200mW OFDM Ethernet Radio