

**MERCURY SERIES Product Family Description**  
**Multi-function Wi-Fi Radio ISM Band Outdoor Solutions with external antenna.**

MERCURY\_PFD\_ENB01W

**Applications**

- Enterprise / Campus Hotspot, Long distance P-T-P / P-T-MP (CPE) Bridge.
- Redundant link between buildings.
- Wireless Distribution System(WDS).
- Wireless Repeater.
- Dedicated ISP connections for high-reliability base stations and subscribers.
- Enterprises or Institutions LAN and PBX extension.
- Cost effective alternative to wired network environment.
- IP-68, enclosure rating for harsh environments.



**MERCURY SERIES**  
**Product Family Description**  
**Multi-function Wi-Fi Radio ISM Band Outdoor**  
**Solutions with external antenna.**

The Lanpro Mercury series provides large output power and high throughput options for ISM Band outdoor Wi-Fi radios. It operates at 2.4GHz and 5GHz unlicensed ISM band with OFDM/TDD technology and support 5 different operation modes – AP / Station / WDS(Bridge) / Repeater / Inter-building private LAN. That provides a turn-key solution for Hotspot, enterprise / campus connectivity, and PWLAN applications.

It's easier and more cost effective to deploy the wireless access environment with the Wireless Distribution System (WDS) technology. Saving 30% ~ 50% cost for telecom operators, ISPs and enterprises.

The Mercury series has powerful security management because it supports WEP 64 / 128 / 152 bits, 802.1x Authentication (EAP), MAC address filter, 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**

• **Large area coverage**

High output power for IEEE 802.11b/g and low noise figure extends signal transmit distance and enlarge the coverage area as well.

• **High data rate at long distance**

Break the distance limit of 802.11a/b/g standards. We succeeded in extending the signal up to 40 Km with the proper antenna.

• **Flexibility**

This radio can play various roles in the wireless infrastructure, the customer can attach the proper antenna according to the application, and make the wireless infrastructure deployment more flexible.

• **QoS - Wi-Fi Multi-media (WMM)**

With this feature, the radio can support quality of service for prioritizing traffic from the Ethernet to the access point.

• **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, and just align the antenna with the sound heard through a headphone, like the one of your mp3 player, easy and simple.

• **Robust construction**

Prepared for harsh environments, the IP-68 rating ensures long life operation.

**B Specifications**

<b>RADIO</b>				
Model No.		LP-348	LP-349	LP-5A
Standards		IEEE 802.11b/g	IEEE 802.11b/g	IEEE 802.11a
Frequency		2.4GHz	2.4GHz	5GHz
<b>OUTPUT POWER / RX SENSITIVITY (Packet Error rate :10%)</b>				
64QAM (54Mbps)		26(±1.5) / -77 (dBm)	31(±1.5) / -79 (dBm)	20(±1.5) / -72(dBm)
16QAM (36Mbps)		28(±1.5) / -85 (dBm)	33(±1.5) / -88 (dBm)	22(±1.5) / -78 (dBm)
QPSK (18Mbps)		30(±1.5) / -90 (dBm)	34(±1.5) / -93 (dBm)	23(±1.5) / -84(dBm)
BPSK (6Mbps)		30(±1.5) / -93 (dBm)	34(±1.5) / -96 (dBm)	23(±1.5) / -90(dBm)
CCK(DSSS)		30(±1.5) / -93 (dBm)	34(±1.5) / -96 (dBm)	N/A
Modulation		OFDM/ (DSSS)		
Duplex		TDD		
Frequency Stability		±10ppm		
Range		20Km	25Km	20Km

INTERFACES				
RF	N-Jack			
Ethernet	IEEE 802.3(10 Base-T) / IEEE 802.3u(100 Base-Tx)			
RSSI (Receive Signal Strength Indication)				
Bridge Mode	Link Test			
Station Mode	Site Survey			
Antenna Alignment	Audible Antenna Alignment (beeper)			
MANAGEABILITY				
Management and setup	Web-based configuration			
Operating mode	AP / Station / WDS(Bridge) / Repeater / Inter-building private LAN			
Network Architecture	Hot spot / PTP Bridge / PTMP Bridge / Repeater			
Operating System	Windows 98 / 2000 / NT / XP			
SNMP agents	MIB II			
Protocol	TCP/IP, IPX/SPX, NetBEUI			
IP Routing	Enable anyIP			
QOS	Wi-Fi Multi-media / Uplink speed limit			
DHCP support	DHCP server / DHCP Client			
Other Features	VLAN / HTTP Re-direct / Virtual Servers / AP Channel Auto Selection / Station Fast Roaming / CPU Loading Monitor / Load Balance			
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 / Firewall / Wireless Client Security Separation (Layer 2 Isolation)			
ENVIRONMENT				
Operating Temperature		-0~55°C	-0~55°C	-30~55°C
Storage Temperature		-30~70°C	-30~70°C	-30~70°C
Humidity	95% non-condensing			
IP Enclosure rating	IP-68			
POWER				
Power Supply	AC 100-264V, DC 24 V, 50-60Hz			
PHYSICAL				
Dimension	259 (L) * 250 (W) *75 (H); mm			
Weight		2.2Kg	2.5Kg	1.8Kg
WARRANTY				
Validity	2 Years			

## C How to order

- **LP-348** 2.4 GHz - 802.11 b/g ENTERPRISE LEVEL WISP OUTDOOR RADIO with WDS, IP-68 rated.
- **LP-349** 2.4 GHz - 802.11 b/g ENTERPRISE LEVEL WISP OUTDOOR RADIO with WDS, IP-68 rated.
- **LP-5a** 5.8 GHz - 5 GHz Band, 802.11a AP, IP-68 rated.