

LP-V4949a121 4940-4990 MHz Vulcan Series licensed band long distance high capacity point to point, point to multi-point Backhaul Outdoor TDMA Subscriber Radio with external antenna and a power of 21 dBm @ QPSK OFDM, AC 100-264V (50-60 Hz) or DC 24V powered.

LPV4949a121_SS_ENB01W

Features:

- 4940-4990 MHz Licensed band.
- Time-Division Multiple Access (TDMA).
- Long distance Point to Point, Point to Multi-point and backhaul links.
- IP-68 water & dust resistant.
- IEC61000-4-5 surge protection.
- Outstanding MTBF.
- AC 100-264V (50-60 Hz) or DC 24V powered.

Applications

- High capacity backhaul in long distances up to 60~80 Km.
- 5/10/20/40 MHz adjustable channel bandwidth.
- Cost-effective alternative to wired network environment.
- Redundant link between buildings.
- Dedicated ISP connections for high-reliability subscribers.
- Enterprises or Institutions.
- LAN and PBX extension for high-reliability subscribers.
- IP-68 rating of the box for operation in hostile environments.



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The LP-V4949a121 Vulcan Series Licensed Band Long Distance High Capacity Point to Point, Point to Multi-Point Backhaul Outdoor TDMA Subscriber Radio with External Antenna has a power of 21 dBm @ QPSK OFDM and is powered from AC 100-264V, 50-60 Hz, or DC 24V is part of the VULCAN Series by LanPro and an ideal solution for high capacity Point to Point and Point to multi-Point backhaul for the 4940-4990 MHz Licensed band and wireless deployment in long distances up to 60~80 Km, providing the customer more options besides the crowded ISM band.

The use of an external antenna lets the user select the appropriate antenna pattern for the application. A high gain Yagi or Parabolic antenna would suit long distance PtP, a Panel or Sector antenna for covering a wide area is more suited for PtmP, or an Omni antenna for giving coverage to mobile CPEs in PtmP applications.

5/10/20/40 MHz adjustable channel bandwidth provides flexibility of deployment to channel plan and high capacity backhaul – truly total accumulated throughput (uplink + downlink) up to 50 Mbps with 40 MHz channel BW.

The series utilizes OFDM – TDMA technology which allowing the balanced uplink/downlink tunnels in a single channel with least collision and highest efficiency. The Ethernet products are primarily designed to provide standard Ethernet interface in a wireless link between distant sites.

The VULCAN Series of radios has powerful security management because they use a proprietary protocol and supports WEP 128 bits, and AES-256 bits encryption. It also has an advanced security and isolates connected CPEs (Layer 2 Isolation). All these functions make the network much more secure and reliable.

A Product Highlights

- **Effective spectrum utilization / variable capacities**

The VULCAN series have 4 levels of channel bandwidth (5/10/20/40 MHz) options, which are adjustable via software. This function provides flexibility to channel plans and variable capacities for different applications.

- **Low EIRP for long system and high capacity transmission**

The VULCAN series improve the throughput performance up to 50~70% more than the standard Wi-Fi products. This means that the system has the same performance with lower EIRP (smaller antenna) compared to other standard Wi-Fi products.

- **Time-Division Multiple Access (TDMA) technique**

TDMA tech can avoid the packets collision and send the packets more efficiently and in a stable way to improve the capacity and quality of data transmission in long distance or NLOS (Near/ Non-Line of sight) situation.

- **High output power OFDM technology and integrated antenna**

High output power OFDM technology provides best performance that supports VULCAN Series to be the most cost-effective solution for the long distance outdoor backhaul.

- **Proprietary security**

The VULCAN series uses a proprietary protocol; hence it cannot connect to other standard Wi-Fi products. It also provides WEP 128 bits, AES-256 bits encryption, an advanced security, and isolates connected CPEs (Layer 2 Isolation) to build the highest security mechanism to prevent malicious attacks from the Internet.

- **Antenna alignment (audible antenna alignment included)**

The *site survey* function provides the RSSI (signal strength) info to indicate the status of antenna alignment. Audible antenna alignment feature for aligning the antenna by the headphone of your mp3 player, quite easy and simple.

- **Heavy duty construction**

Prepared for hostile environment, the IP-68 rating guarantees long life operation.

B Specifications

RADIO	
Modelo No.	LP-V4949a121
Frequency Range	4940-4990 MHz
OUTPUT Amplifier POWER / RX Sensitivity (Packet Error Rate: 10%)	
64 QAM (54 Mbps)	17 (±1.5) / -72 dBm
16 QAM (36 Mbps)	19 (±1.5) / -78dBm
BPSK (18 Mbps)	21 (±1.5) / -84dBm
QPSK (6 Mbps)	21(±1.5) / -90dBm
CCK (DSSS)	N/A
Output Power	21 dBm
Modulation / Media Access	OFDM / TDMA
Duplex	TDD
Channel Bandwidth	5 / 10 / 20 / 40 MHz
Frequency Stability	±10 ppm
Range	60~80 Km

INTERFACES	
RF	N-Jack , 50 Ohm
Ethernet	IEEE 802.3 (10 Base-T) / IEEE 802.3u (100 Base-Tx)
ADVANCE	
Base Station Scanning	RSSI
Watchdog	Si
Antenna alignment	Audible Antenna Alignment beeper (Included)
MANAGEABILITY	
Management and setup	Web-based configuration
Network Architecture	PTP Bridge/ PtMP Bridge
Operating System	Windows 98 / 2000 / NT / XP /W7 / W8
SNMP agents	MIB II
Protocol	TCP/IP, IPX/SPX, NetBEUI
SECURITY	
Data Encryption	WEP 128 bits/AES-256 bits
Other security	Proprietary Protocol/Isolates connected CPEs (Layer 2 Isolation)
ENVIRONMENT	
Operating Temperature	-30~55 °C
Storage Temperature	-30~70 °C
Humidity	95% non-condensing
POWER SUPPLY	
Opción X: 1 =100-264 VAC 50-60 Hz, 24 VDC	
PHYSICAL	
Dimensions	Typical 259 (L) * 250 (W) *75 (H) mm
Weight	1.8 Kg (3.97 lb)

C How to Order:

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