LP-V4949ai144

4940-4990 MHz Vulcan Series Outdoor TDMA subscriber radio with internal antenna with an EIRP of 41 dBm, AC 100-264V (50-60 Hz) or DC 24V powered.

LPV4949ai144_SS_ENB01W

Features

- 4940-4990 MHz 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 50 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.

VULCAN Series

Licensed Band | 50 Km | 40 Mpbs | OFDM | TDMA | DSSS/CCK | Fractional Bandwidth | Backhaul | Long Distance | PTP Bridge | IP-68 | PtmP

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The LP-V4949ai144 Vulcan Series Outdoor TDMA Subscriber Radio with Internal Antenna, with an EIRP of 41 dBm, 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 band, and wireless deployment in long distances up to 50 Km, providing the customer more options besides the crowded ISM band. The use of an internal antenna simplifies the deployment work.

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**

Integrated panel antenna with the high output power OFDM technology provides best performance and lowest price and at the same time makes the VULCAN series to be the most cost effective solution in the long distance wireless backhaul market.

- **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-V4949ai144**
Frequency Range	4940-4990 MHz
OUTPUT Amplifier POWER (EIRP)	
64QAM (54 Mbps)	38 (±2) dBm
16QAM (36 Mbps)	40 (±1) dBm
BPSK (18 Mbps)	41 (±1) dBm
QPSK (6 Mbps)	41 (±1) dBm
CCK (DSSS)	41 (±1) dBm
Antenna Gain	18 dBi
Receive Sensitivity (Packet error rate:10%)	-75 dB (±2) dBm @64QAM 2/3 -82 dB (±2) dBm @16QAM 1/2 -86 dB (±2) dBm @64QPSK 1/2 -90 dB (±2) dBm @64BPSK 1/2
Modulation / Media Access	OFDM / TDMA
Channel Bandwidth	5 / 10 / 20 / 40 MHz
Frequency Stability	±10 ppm
INTERFACES	
Ethernet	IEEE 802.3 (10 Base-T) / IEEE 802.3u (100 Base-Tx)

ANTENNA	
Frequency	2.9 GHz~6.1 GHz
Gain	23 dBi
Beamwidth	H 11.4° ; E 10.6°
VSWR	1.7 :1
Frot/Back ratio	40 dB
Impedance	50 Ohm
Alignment	Audible antenna alignment beeper(Optional)
ADVANCE	
Base Station Scanning	RSSI
Watchdog	yes
Antenna alignment	yes
MANAGEABILITY	
Management and setup	Web-based configuration
Network Architecture	PTP / PtmP
Operating System	Windows 98 / 2000 / NT / XP /W7 / W8
SNMP agents	MIB ll
Protocol	TCP/IP, IPX/SPX, NetBEUI
SECURITY	
Data Encryption	WEP 128bits/AES-256bits
Other security	Proprietary Protocol/Isolates connected CPEs (Layer 2 Isolation)
ENVIRONMENT	
Operating Temperature	-30~55ºC
Storage Temperature	-30~70ºC
Humidity	95% non-condensing
POWER SUPPLY	
Option X: 2 =DC 48V	
PHYSICAL	
Dimensions	Typical 335 (L) * 335 (W) *81 (H) mm
Weight	2.9 Kg (6.39 lb)

C How to order

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LanPro is continuously improving its products and reserves the right to change specifications and availability without prior notice.