LP-V4958ai146

4958-5875 MHz Vulcan Series Outdoor TDMA subscriber radio with internal antenna with an EIRP of 46 dBm, AC 100-264V (50-60 Hz) or DC 24V powered.

LPV4958ai146_SS_ENB01W

Features

- 4958-5875 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.
- $\hfill\blacksquare$ 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-V4958ai146 Vulcan Series Outdoor TDMA Subscriber Radio with Internal Antenna, with an EIRP of 46 dBm, powered from AC 100-264V (50-60 Hz) or DC 24V powered 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 4958-5875 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.



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-V4958ai146	
Frequency Range	4958-5875 MHz	
OUTPUT Amplifier POWER (E	IRP)	
64QAM (54 Mbps)	41 (±2) dBm	
16QAM (36 Mbps)	45 (±1) dBm	
BPSK (18 Mbps)	46 (±1) dBm	
QPSK (6 Mbps)	46 (±1) dBm	
CCK (DSSS)	N/A	
Antenna Gain	23 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	4.9 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 II	
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	-30~55°C	
Storage Temperature	-30~70°C	
Humidity	95% non-condensing	
POWER SUPPLY		
Option X: 1 =AC 100-264V 50-60 Hz, DC 24V		
PHYSICAL		
Dimensions	Typical 335 (L) * 335 (W) *81 (H) mm	
Weight	2.9 Kg (6.39 lb)	



How to order

LP-V4958ai146 4958-5875 MHz Vulcan Series Outdoor TDMA subscriber radio with internal antenna with an EIRP of 46 dBm, AC 100-264V (50-60 Hz) or DC 24V powered.

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