### LP-V2424ai241

2402-2482 MHz Vulcan Series Outdoor TDMA subscriber radio with internal antenna with an EIRP of 41 dBm, DC 48V powered.

LPV2424ai241\_SS\_ENB01W

#### Features

SLANPRO

- 2402-2482 MHz ISM 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.
- DC 48V powored.



# LP-V2424ai241 2402-2482 MHz Vulcan Series Outdoor TDMA subscriber radio with internal antenna with an EIRP of 41 dBm, DC 48V powered.

The LP-V2424ai241 2402-2482 MHz Vulcan Series Outdoor TDMA Subscriber Radio with Internal Antenna, with an EIRP of 41 dBm, powered from DC 48V 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 2402-2482 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.

## 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.



# 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-V2424ai241
Frequency Range	2402-2482 MHz
<b>OUTPUT Amplifier POWER (EIRP</b>	
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	2.302 GHz~2.482 GHz	
Gain	18 dBi	
Beamwidth	H 16° ; E 16°	
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 330 (L) * 295 (W) *105 (H) mm	
Weight	2.8 Kg (6.17 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.