#### LP-MOV2000

## Series OFDM-MESH Mobile Solution Vehicle subscriber unit. Boundless mobility and variety for mobile video / data / voice transmission.

LPMOV2000\_PFD\_ENB01W

### **Applications**

- 5/10/20 MHz adjustable channel bandwidth.
- Cost effective alternative compare to 3G/4G or satellite network environment.
- Redundant link for Vehicles data transmission.
- Mobile network in warehouse, industrial area, national park, airport, etc.
- Public security network –
  Stationary and vehicular surveillance and communication.
- Healthcare system Stationary and vehicular Mesh Networking.
- Vehicular video / data / voice transmission.

# The advantages of the NYX Mesh VSU

- IEEE 802.11s Mesh Protocol.
- Variable Frequencies 400 / 900 MHz / 2.4 / 5 GHz.
- Auto-discover & self-configure.
- Self-tuning & self-healing.
- Vehicle Subscriber Unit (VSU).
- 10~30 V DC.



### LP-MOV2000

Series OFDM-MESH Mobile Solution Vehicle subscriber unit. Boundless mobility and variety for mobile Video / data / voice transmission.

The Nyx-Mesh VSU (Vehicle Subscriber unit) Series from LanPro provides LOS (Line of Sight) and NLOS (Near Line of Sight) solutions for mobile video / data/ voice transmit applications. LOS solution includes ISM Band / UNII band / Public Safety band, and some other frequency; NLOS solution includes UHF band (300 MHz & 400 MHz).

The wireless node can self-configure, dispose the network, and the net work failures can be repaired automatically so that the overall performance and the usability achieves the optimization.

The Nyx-Mesh VSU series utilizes Time Division Duplex technology allowing operation on a single channel. The Ethernet products are primarily designed to provide standard Ethernet interface with robust aluminum alloy indoor unit.



### A FEATURES AND BENEFITS

Boundless mobility and variety.

Various frequency options provide both LOS and NLOS solutions to achieve the real mobility- anytime, anywhere. To collocate with proper backhaul, Nyx-Mesh VSU series can extend the network to where vehicle can arrive without concerning the limitations of cable deployment for internet access or any kind of Ethernet data transmission.

- All wireless nodes auto-discover and self-configure.
- Self-tuning and self-healing mesh for network optimization.
- High throughput performance and low latency.
- Support WMM to prioritize the real time voice, video, and data applications.
- Transmit Power Control.
- Effective spectrum utility.

Channel BW of the Nyx-Mesh VSU series can be adjusted by software (5/10/20MHz for optional), which allows more non-overlapping channels in practical deployment and provides better flexibility in deploying the network.

Security.

WEP 64 / 128 / 152 bits for Mesh protocol. 802.1x Authentication (EAP), MAC access control, disable broadcast the SSID, client isolation, WPA-PSK, WPA-TKIP encryption and WPA2 (AES-128bits) for Access point mode.

SPECIFICATIONS					
RADIO					
Operating Channels	300 MHz / 400 MHz / 900 MHz / 2.4 GHz / 5 GHz				
Channel Bandwidth	Software selectable channel BW of 5, 10MHz for UHF Band (300/400 MHz).				
	Software selectable channel BW of 5, 10 and 20 MHz for other frequencies.				
Output power and Rx Sensitivity *RX sensitivity: Packet Error Rate: 10%	Data Rte	Modulation	Tx Output pwr	Rx sensitivity	
	ISM Band / UNII Band (2.4GHz / 5GHz).				
	54 Mbps@OFDM	64 QAM	18 (±1.5) dBm	-75 dBm	
	36 Mpbs@OFDM	16 QAM	21 (±1.5) dBm	-82 dBm	
	18 Mbps@OFDM	QPSK	22 (±1.5) dBm	-86 dBm	
	6 Mbps@OFDM	BPSK	23 (±1.5) dBm	-90 dBm	
	Public Safety Band (900MHz)				
	54 Mbps@OFDM	64 QAM	20 (±1.5) dBm	-75 dBm	
	36 Mpbs@OFDM	16 QAM	21 (±1.5) dBm	-82 dBm	
	18 Mbps@OFDM	QPSK	22 (±1.5) dBm	-86 dBm	
	6 Mbps@OFDM	BPSK	25 (±1.5) dBm	-92 dBm	
	UHF Band (300 / 400 MHz)				
	54 Mbps@OFDM	64 QAM	33 (±1.5) dBm	-90 dBm	
	36 Mpbs@OFDM	16 QAM	33 (±1.5) dBm	-98 dBm	
	18 Mbps@OFDM	QPSK	36 (±1.5) dBm	-101 dBm	
	6 Mbps@OFDM	BPSK	37(±1.5) dBm	-103 dBm	
Frequency Stability	±10 ppm				
Modulation	OFDM-Mesh; 802.11S				
INTERFACES					
RF (connect to antenna)	N-type (Jack)				
Ethernet	IEEE 802.3(10Base-T) / IEEE 802.3u(100Base-Tx)				



SPECIFICATIONS				
MANAGEABLILITY				
Management and setup	Web-based configuration			
Operating mode	Mesh / Access Point			
SNMP agents	MIBII			
Protocol	TCP/IP, IPX/SPX, NetBEUI			
Operating system	Windows 98 / 2000 / NT / XP			
Network architecture	Point to point / Point to multi-point / Hotspot			
Bandwidth management	Wi-Fi Multimedia / Link speed limit (n*64 Kbps)			
DHCP supports	DHCP client			
Other features	Virtual AP (supports up to 8 SSID)			
SECURITY				
Data encryption	WEP 64/128/152 bits encryption (Mesh / Access point mode)			
	WPA-PSK, WPA-TKIP, WPA2-AES 128bits (Only Access point mode)			
Authorization	MAC Address Access Filter			
Advanced security	Disable broadcast SSID			
	Wireless Client Security Separation (Layer 2 Isolation)			
ENVIRONMENT				
Operating temperature	-30°C~55°C			
Storage temperature	-30°C~70°C			
Humidity	95% non-condensing			
POWER SUPPLY				
DC 10~30 VDC				
PHYSICAL				
Dimension	230 (L) ×198 (W) ×60 (H) mm			
Weight	2.3 Kg			
WARRANTY				
1 year				
ADVANCE				
Auto-discover & self-configuration				
Self-tuning & self-healing				
Watchdog				

## B How to Order

LP-MOV200437 400 MHz, 5 W 54 Mbps OFDM Mesh Vehicle Subscriber Unit, 10 $\sim$ 30 VDC.

LP-MOV200925 900 MHz, 0.3 W 54 Mbps OFDM Mesh Vehicle Subscriber Unit, 10~30 VDC.

LP-MOV202423 2.4 GHz, 0.2 W 54 Mbps OFDM Mesh Vehicle Subscriber Unit, 10~30 VDC.

LP-MOV205023 5 GHz, 0.2 W 54 Mbps OFDM Mesh Vehicle Subscriber Unit, 10~30 VDC.