LP-288ai Small and Compact 5.8GHz OFDM Outdoor Radio 5/10/20MHz Fractional bandwidth

LP288ai_SS_ENB01W

Applications

- 4 Km range competitive cost PTP or PTMP Bridge.

- Monitoring of remote systems. (cameras, voice, etc.)

- 5.8 GHz cost effective alternative to wired network environment.

- Redundant link between buildings.

- Wireless Repeater.

- Dedicated ISP connections for high-reliability subscribers.

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LP-288ai series is designed for carriers and Internet Service Providers to address the last-mile wireless infrastructure solution with high performance and competitive cost. Compliant to IEEE802.11a standard; it comes with software controllable RF power output and distant setting for optimal distance (up to 4 km) vs throughput performance.

The small and compact outdoor casing complies with IP68 standard which is water and dust resistant. The LP-288ai has a data rate of up to 108Mbps on Turbo mode. With an option to have the WDS (wireless distribution system) turned on or off, it is interoperable with most of the AP in the market. Besides, it can also support multiple users with the WDS turned off.

Data encryption such as WEP, WPA and WPA2 provide the necessary security and interoperability with other equipment is possible. Enhanced access control can be done with the use of MAC address filtering, both on AP and client side. Additionally, it is firmware upgradeable through web-server and Telnet.

A Relevant Characteristics

- **Effective spectrum utility**
  LP-288ai uses advanced technology to narrow the channel into smaller bandwidths than other wireless radios. There are software selectable channel bandwidths of 5, 10 and 20MHz.

■ **Turbo mode increases the performance up to 50%**
Turbo mode supports up to 108Mbps data rate which can enhance the throughput performance of the radio up to 50%.

Bandwidth control / QoS
■ Bandwidth control can limit the throughput of the 288ai, and the QoS function provides better Video/VOIP signal quality.

■ **Security**
WEP 64 / 128 / 152 bits, 802.1x Authentication (EAP), MAC access control, disable broadcast the SSID, client isolation, WEP - WPA- WPA2 (64,128,152) build the highest security mechanism to prevent malicious attack.

■ **Antenna Adjustement**
The function provides MAC address the RSSI (signal strength) info of the units which associated to the LP-288ai.

B **Specifications**

RADIO		
Operating Channels	FCC (USA)	5.150GHz~5.350GHz 5.725GHz~5.825GHz
	ETSI (EUR)	5.150GHz~5.350GHz 5.470GHz~5.725GHz
	MKK (JAPAN)	5.150GHz~5.250GHz
	China	5.725GHz~5.850GHz
Channel Bandwidth	Software selectable channel band-widths of 5, 10 and 20MHz	
Output Power	Up to 20dBm	
Receive Sensitivity (BER 1E10-6) In a 5MHz channel	-71dBm (±2dB) @ QAM-64 -81dBm (±2dB) @ QAM-16 -84dBm (±2dB) @ QPSK -89dBm (±2dB) @ BPSK	
Frequency Stability	±10 ppm	
Modulation	OFDM	
Internal Antenna Gain	12dBi	
Beamwidth	H 40º ; E 33º	
VSWR	<=2.0:1	
Front to Back Ratio	40dB	
Impedance	50 Ohm	
Range	Up to 8 Km.	
INTERFACES		
Ethernet	IEEE 802.3(10Base-T) / IEEE 802.3u(100Base-Tx)	
MANAGEABLILITY		
Management and setup	Web-based	
SNMP agents	V1, V2c	
Password Access control to configuration	2 levels	
Operating System	Windows 2003 / XP / Vista	

Network Architecture	PTP / PTMP
Bandwidth management	Yes
Other features	VLAN transparent
SECURITY	
Data Encryption	WEP - WPA- WPA2 (64,128,152)
Authentication	802.1x Auth.(EAP)
Authorization	MAC Address Access and protocol Filter
Other security	Disable broadcast SSID(suppress SSID); Wireless Isolation
ENVIRONMENT	
Operating Temperature	-40ºC~55ºC
Storage Temperature	-40ºC~70ºC
Humidity	95% non-condensing
POWER SUPPLY	
AC 100-264 V, 50-60Hz; DC 24 V	
PHYSICAL	
Dimensions	215 (L) ×120 (W) × 65 (H)
Weight	750g; 1.65lb
WARRANTY	
1 year	
ADVANCE	
Base Station Scanning	RSSI
Watchdog	Yes

RANGES						
Data Rate	Modulation	Transmission power dBm	Receiver Sensitivity (dBm)	Data Rate (Mbps)	Turbo Mode (Mbps	Range (Km)
54 Mbps	64QAM	16	-71	23.4	35.1	2
36 Mbps	16QAM	18	-81	18.6	27.9	3
18 Mbps	QPSK	19	-87	10.2	15.3	5
6 Mbps	BPSK	20	-90	3.8	5.7	8

Best performance case: 2-3 Km with optimum system operating margin(SOM).

C **How to order**

LP-288ai