ZyXEL

High Speed, Long Range Ethernet Wireless Bridge for PTP or PT2P for Backhaul Connection

ZyXEL G-6000 is an instantly deployable outdoor broadband solution for inter-building network connectivity to eliminate the need for expensive leased lines or be a backup for other media. With Point-to-2-Points configuration, users can either extend the communication range or overcome the non-line-of-sight problems. Designed-in authentication and encryption secure the transmission of sensitive information.

Benefits

Flexibility
Operating in the license-free 2.4 GHz frequency band, the G-6000 provides an excellent broadband experience for long-range outdoor wireless Ethernet connection. Acting in a simple PTP topology, it relieves the need to lay wires and labor required to bridge LAN segments between buildings. Configured as a PT2P topology, it extends the effective communication range, as well as offering a means to overcome problems experienced in a non-line-of-sight environment.

High Speed & Security
With Up to 108 Mbps data rate and TKIP/AES security support, the G-6000 is very suitable for business-class applications which require high performance and security. It is also conceived as a cost-effective alternative to leased lines for reducing recurring charges, and offering fast return-on-investment to its users especially WISP, ILEC and CLEC.

Ease-of-Deployment
The PoE design eliminates the need for an additional power cord while installed. The AK-100, with RSSI and SNR indicators, provides a great help to the installer when targeting the antenna, easily especially for long-distance alignment. The G-6000 provides an instant and independent infrastructure which is immediately deployable with lower infrastructure costs than any other solution on the market.

Manageability
Smart data rate and auto channel selection allow the G-6000 to adapt to varied environments, maximizing the throughput and minimizing the operational adjustments needed. A web-based management system provides system status, system configuration and system log functions helping the operator to manage the system in an easy way. RSSI, SNR and LAN LEDs on the indoor unit make the problem diagnosis simple. Unit configuration and firmware upgrades through FTP are also provided.

- Point-to-Point or Point-to-2-Points configuration
- Up to 108 Mbps
- Up to 20 km
- WPA-PSK, AES/TKIP
- Smart channel and best data rate selection support
- SNMP, HTTP, FTP support
- Antenna alignment assistance
- Indoor-unit status awareness

Wireless Backhaul Bridge

G—6000

Specifications

Radio	
Frequency range	2400-2500MHz
RF modulation	OFDM with BPSK, QPSK, 16 QAM, 64 QAM
RF access method	CSMA/CA
Transmit power	0 ~ 20 dBm (typical)
Over-the-air data rate	Mbps 6 9 12 18 24 36 48 54 108 Modulation BPSK BPSK QPSK QPSK 16QAM 16QAM 64QAM 64QAM 64QAM
Antenna alignment	Special external alignment kit with link status and buzzer

Networking Communication	
Standards compliance	IEEE 802.3, IEEE 802.1d, TCP/IP

Management & Secuiry	
Management and setup	SNMP, Web/Telnet based management interface from wired LAN and wireless link
Software upgrade	FTP download
Security	WPA for mutual authentication, MAC filtering
Over-the-air data encryption	Hardware based AES/TKIP

Mechanical, Electrical & Operating Features

	Outdoor Unit	Indoor Unit
Antenna connection	N male connector via 2m HDF 400 RF coaxial cable	
Ethernet Connection		Auto-sensing 10/100 BaseT (RJ-45)
Power connection	15V DC via Category 5 UTP cable with 8-pin special water-proof female connector	100-240 VAC to 15 VDC power adaptor, 50~60Hz
Console connection	8-pin special water-proof male connector	
LEDs		PWR, SYS, RSSI (L,M,H), SNR, LAN 10M/ 100M
Dimension	250(H) x 198(W) x 75(D) mm	181mm(W) x 128mm(L) x 36mm(H)
Weight	2050 gm	300g
Operating temperature	-30˚C ~ +60˚C	0˚C~ +40˚C
Relative humidity	0%~ 95% (non-condensing)	0%~ 90% (non-condensing)
Physical installation	With Mount bracket made by Stainless steel for 40~50mm diameter mast installation	
Category 5 UTP cable length	20m default, 50m/90m option	

Regulatory Approvals	
EMC	FCC Part 15 Subpart B, FCC Part 15 Subpart C; EN300 328, EN301 489
Safety approval	UL1950, CSA C22.2 No 950, EN60950, IEC 950
Environmental	IP66

For more product information, visit us on the web www.ZyXEL.com