

### LONG RANGE WIRELESS

- Two bridges form a point to point link over distances of up to 40km
- Multiple bridges can be chained together for maximum connectivity

### SUPERIOR THROUGHPUT

- Long-range throughput reaches speeds of up to 8Mbps
- Short-range throughput reaches speeds of up to 10Mbps
- Extenders include a powerful built-in 23dBi antenna

### LOW-COST INSTALLATION

- Higher throughput and better coverage means fewer relay units are required
- Eliminates the need for a comprehensive wired network backbone
- Can be deployed quickly and easily even in harsh outdoor environments

### LOW POWER CONSUMPTION

- Consumes less power compared to alternative long-distance infrastructure
- Power over Ethernet eliminates the need for additional power cables

### MINIMAL MAINTENANCE

- Graphical network utility assists with network monitoring and management
- Robust, waterproof outdoor unit is built to withstand the elements
- Advanced security supports WEP, TKIP, and AES encryption

## Long Distance Wireless Outdoor Bridge



The D-Link Long Distance Wireless Outdoor Bridge is designed to provide long distance wireless connectivity in areas where a wired network infrastructure is prohibitive. The integrated Intel® IXP Networking Processor operates on non-licensed spectrums, offering low cost, durable, and reliable outdoor wireless broadband connectivity. When operating with an unobstructed line-of-sight, the D-Link wireless backhaul solution is able to achieve connections at distances of up to 40km. These impressive ranges are possible through the application of a TDMA modification to the MAC layer of standard 802.11.

### Extend Your Network

The DAP-3760 and DAP-3860 Outdoor Bridges are designed for harsh outdoor environments, providing highly reliable, stable transmissions, and excellent performance in almost any setting. A 23dBi antenna ensures transmission quality while Intel TDMA allows the bridges to attain speeds of up to 8Mbps at distances of up to 100km (using relay). The DAP-3860 uses two radio cards with link aggregation technology to double throughput for point to point operation.

### An Affordable Backhaul Solution

The D-Link Long Distance Wireless Outdoor Bridge offers a reliable alternative to backhaul solutions such as WIMAX and GSM. When rugged terrain prevents the installation of a standard wired network backbone, a wireless outdoor bridge can be deployed. In fact, a 5GHz wireless solution is ideal in sparsely populated areas where electronic interference is minimal. An outdoor bridge can be installed with minimal additional cabling thanks to Power over Ethernet capabilities.

### Connect Rural Areas to the Internet

The DAP-3760 and DAP-3860 Outdoor Bridges can be used to connect urban hubs with rural endpoints. Internet access is deliverable via one or many intermediate nodes as part of a flexible architecture that is simple to deploy, manage, and maintain. Security over these distances is assured through the use of WEP, TKIP, and AES encryption schemes.

### Keep Even the Most Remote Users Online

A wireless backhaul installation can provide network access for remote offices and academic buildings areas that cannot be reached by cable. For instance, rural medical clinics can use the system for telemedicine applications, to exchange vital patient data with city hospitals and health care centers.



### Long Distance Wireless Outdoor Bridge

Technical Specifications		
System	DAP-3760	DAP-3860
CPU	IXP425, 533MHz	
Memory	16MB Flash 32MB SDRAM (Upgradeable to 64MB)	
Power	Power over Ethernet (PoE Injector Output 19.3W)	
Radio		
RF Module*	FCC: XA-632AH CE: AG-623C	
Operating Frequency*	FCC: 5.725~5.850 GHz CE: 5.470~5.600 GHz, 5.650~5.725 GHz	
RF Modulation	802.11a: OFDM (BPSK, QPSK, 16-QAm, 64-QAm)	
RF Output Power*	24dBm at Radio for FCC (Band 4) 30dBm EIRP for ETSI 301 893 (Band 3)	
Sensitivity	-90dBm @ 6Mbps -73dBm @ 54Mbps	
Regulation Certification	FCC Class B CE IC C-Tick NCC	
Operational / Software		
Operating Modes	Bridge	
Security	WEP64/128/152, WPA-PSK/WPA2-PSK, TKIP, AES	
Radio Bandwidth Control	20MHz/40MHz	
Super A/G	Fast Frames, Bursting Compression	
Link Aggregation	-	Throughput Enhancement
Intel TDMA	For Long Distance Transmission	
Distance in Meters	Auto ACK-Time Adjustment	
Management Statistics	Wireless and Ethernet	
Link Test	Self-Wireless Connection Test	
Configuration and Management	Web-based Management (Secure SSL) Command Line Interface (SSH or RS-232 (9600)) Windows-based Utility SNMPv2	
Firmware Upgrade	Web/Windows Management Tool	

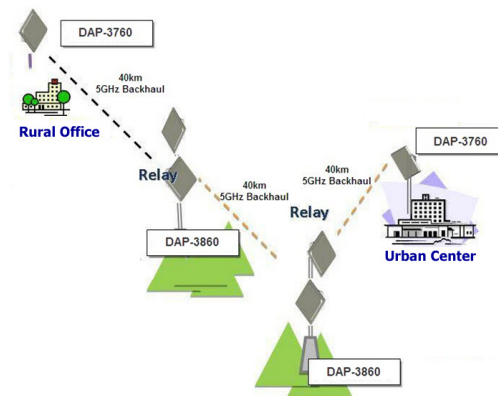


### Long Distance Wireless Outdoor Bridge

Physical/Interface	DAP-3760	DAP-3860
Ethernet	10/100 BaseT x 1 Auto Sense, Negotiate	
RS-232 (COM)	RS-232 (UART) in RJ-45 Form Factor (For Debugging)	
Buzzer	Signal Indication	
Reset Pin	2 Pin in COM Port	
Enclosure & Environment		
External Antenna Connector	–	N-Type
Enclosure	IP-67 (Die-Casting), Level "17" Beaufort Scale, Vented Design	
Mounting	Pole Mount (ADC - 12 Aluminum Alloy)	
Operating Temperature	-30° ~ 70° C	
PCBA Dimensions	160mm x 135mm	
Dimensions	320mm x 320mm x 27.5mm (L x W x H) (including antenna)	
Weight	2.4kg (including antenna)	
Operating Humidity	10 ~ 95% RH (non-condensing)	
Antenna Characteristics		
Antenna Type	Internal High Gain Directional Antenna	Internal High Gain Directional Antenna External High Gain Directional Antenna
Gain	23dBi (Default Antenna)	
Frequency Range	5400 ~ 5850 MHz	
HPBW (Horizontal)	10 Degrees	
HPBW (Vertical)	10 Degrees	
Additional Hardware (Optional)		
ANT70-SP	Antenna Surge Protector	

\* Programmable based on regional regulations

### Long Range Network Implementation Using D-Link Outdoor Bridges



D-Link Corporation  
 No. 289 Xinhu 3rd Road, Neihu, Taipei 114, Taiwan  
 Specifications are subject to change without notice.  
 D-Link is a registered trademark of D-Link Corporation and its overseas subsidiaries.  
 All other trademarks belong to their respective owners.  
 ©2009 D-Link Corporation. All rights reserved.  
 Release 03 (October 2009)