D-Link®

DVA-6800Z

Wi-Fi 6 Combo VDSL2 GPON IAD

Features

Convenience
- User-friendly web configuration interface
- Compatible with all standard Internet applications
- Industry standard and interoperable DSL interface

Wireless
- WLAN with data transfer rates of up to 3600 Mbps, compatible with IEEE 802.11n/ac/ax
- Wireless LAN security features: WPA2/WPA3 Personal™
- Supports Zigbee 3.0

Broadband
- Asynchronous Transfer Mode (ATM) and digital subscriber line (DSL) support
- Packet Transfer Mode (PTM) and digital subscriber line (VDSL)
- Gigabit Ethernet Internet Port
- MSA host supporting 2.5 Gb/s fiber module

Router Features
- IP routing and bridging
- Point-to-point protocol (PPP)
- Quality of Service (QoS)
- Universal Plug-and-Play (UPnP)
- Web Filtering
- USB mass-storage, SAMBA

The DVA-6800Z Wi-Fi 6 Combo VDSL2 GPON IAD is a highly integrated router with everything your home or small business needs for high-speed Internet access. It combines an ADSL2+/VDSL2 modem, Gigabit Ethernet Internet Port, a GPON optical WAN interface, 4G mobile Internet support by external USB dongle, Voice over IP (VoIP), and Gigabit wireless together in a single, easy-to-use product that shares an Internet connection for all your devices.

Multiple Failover Redundancy and Future Connectivity

The D-Link DVA-6800Z Wi-Fi 6 Combo VDSL2 GPON IAD comes with a built-in high-speed VDSL/ADSL modem, a 10/100/1000 Ethernet WAN/LAN port, and USB 3.0 and 2.0 ports which support 3G/4G mobile broadband USB adapters. This means that if your primary connection method should fail, the DVA-6800Z will automatically fall back to your pre-defined backup connection. Additionally, the DVA-6800Z features a GPON port with a built-in WBF, provding a reliable connection that allows you to take advantage of the high bandwidths offered by GPON.

Smooth Streaming with Wireless AX

The DVA-6800Z uses the latest Wireless AX technology, which provides transfer rates of up to 3.6 Gbps. The router operates on both the 2.4 GHz and 5 GHz wireless bands at the same time using concurrent dual-band technology. This allows you to browse the web, chat and e-mail using the 2.4 GHz band, while simultaneously streaming digital media, playing online games, or making Internet voice calls on the 5 GHz band.

Voice Over IP

The DVA-6800Z provides Voice over IP technology with advanced communication features, and is compatible with industry-wide phone services so you can make and receive calls reliably. Use the FXS phone port on the DVA-6800Z to connect an ordinary phone set for your VoIP phone calls, and use the router functions to connect all of your family members or personnel to the Internet for a fast online experience throughout your home or office.

Smooth Transmissions

The DVA-6800Z Wi-Fi 6 Combo VDSL2 GPON IAD has built-in dual active firewalls (SPI and NAT) to help protect your local network from intrusions. It is also equipped with WPA3 wireless encryption technology and access control to help protect your network from unauthorized access and outside threats so you can use the Internet with confidence. In addition, QoS priority queues and packet prioritization can minimize traffic congestion and deliver smooth VoIP and streaming media, providing you with the best possible Internet experience.

Easy to Set Up

Setting up the DVA-6800Z is easy with the D-Link setup wizard. Simply open the setup utility and follow a few easy steps to get your home network up and running. You can also set up an encrypted wireless network with the touch of a button using Wi-Fi Protected Setup (WPS). Simply press the respective WPS buttons on each device to instantly establish an encrypted connection.
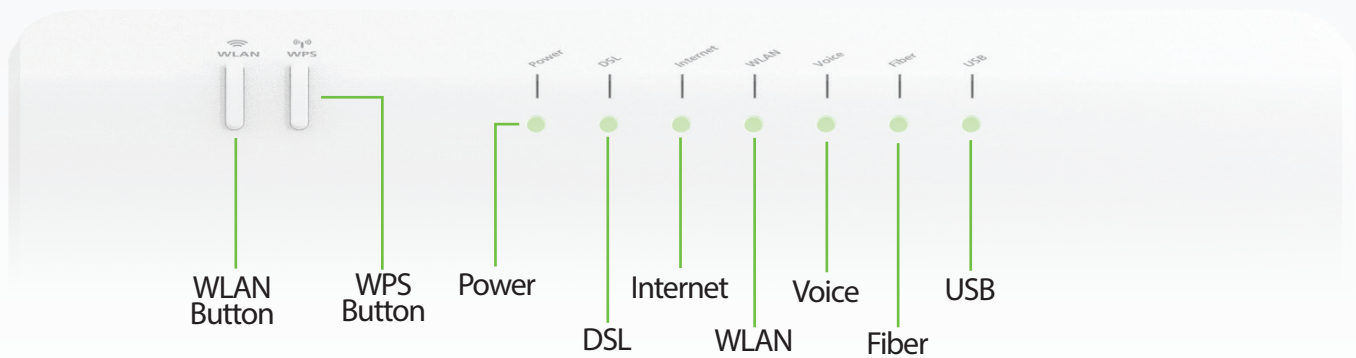
File Sharing Right at Your Fingertips

The DVA-6800Z lets you connect a USB storage device and instantly share documents, movies, pictures, and music. You can put your music library on a USB drive and share it with your entire home. You can show photos on the living room TV while a family member watches a movie on their computer. You can stream media files to multiple devices without interruption, or save them to your device for offline playback. The intuitive interface lets anyone immediately connect to a variety of entertainment options stored securely on your own storage device.
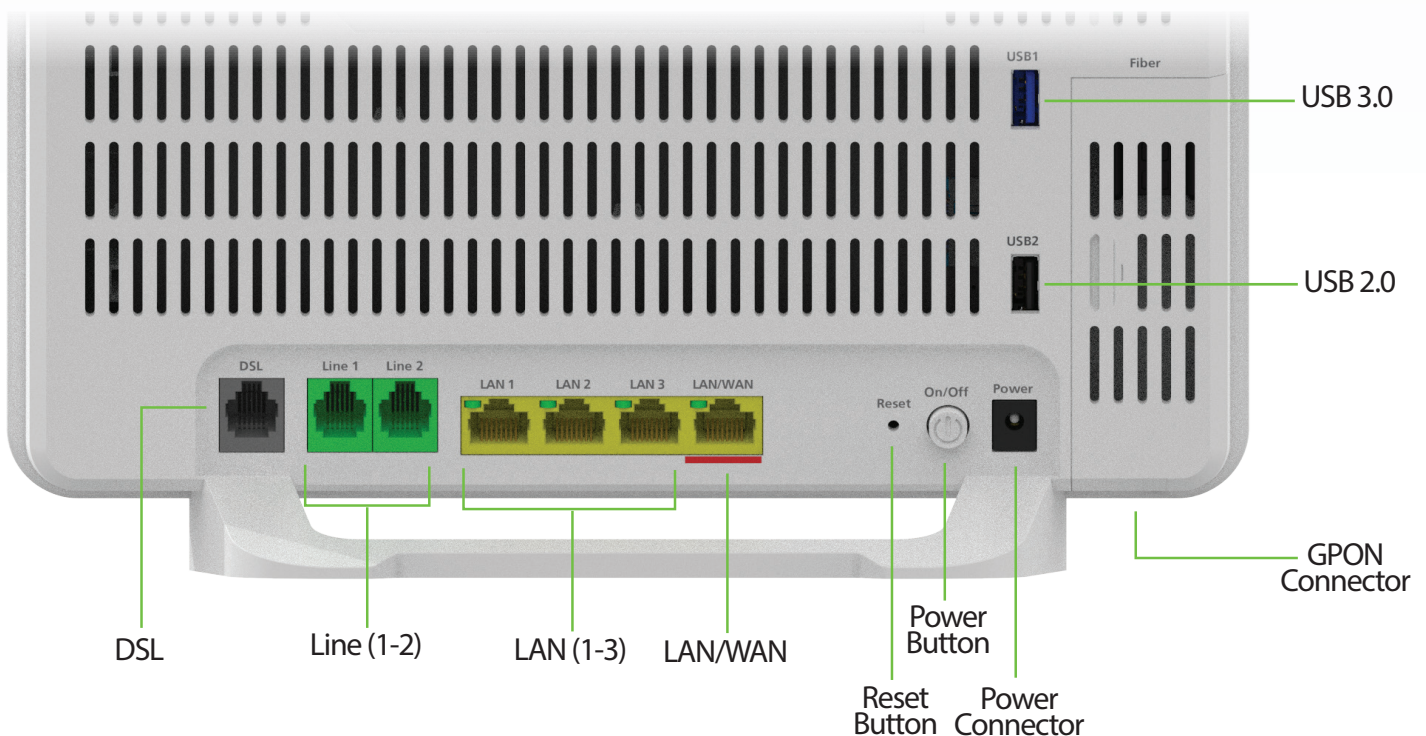
Integrated with Zignee 3.0 for Smart Homes

The DVA-6800Z fully supports Zignee 3.0 and is compatible with all end devices that use the standard. This enables you to implement a wide variety of smart home applications, such as light control via your smartphone, or contact and motion sensors for security and convenience.

Front Panel LEDs

WLAN Button • WPS Button • Power • DSL • Internet • WLAN • Voice • Fiber • USB

Rear Panel Interfaces

DSL • Line (1-2) • LAN (1-3) • LAN/WAN • Reset Button • Power Button • Power Connector • USB 3.0 • USB 2.0 • GPON Connector

Technical Specifications

General

Device Interfaces	• One RJ-11 xDSL port • Two RJ-11 FXS VoIP ports • One USB 3.0 port • One USB 2.0 port • One Gigabit Ethernet LAN/WAN port • Three Gigabit Ethernet LAN ports • GPON SC/APC port	• Reset button • WLAN on/off button • WPS button • Power Connector • Power Switch

Antenna Type	• 2.4 GHz
	  • Four internal MIMO antennas (4x4)
		• 5 GHz
		  • Four internal MIMO antennas (4x4)

Data Signal Rate	• 2.4 GHz
	  • Up to 1.2 Gbps
		• 5 GHz
		  • Up to 2.4 Gbps

Standards	• IEEE 802.11ax • IEEE 802.11ac • IEEE 802.11n • IEEE 802.3	• IEEE 802.3u • IEEE 802.3ab • IEEE 802.3az • IEEE 802.3x
Minimum System Requirement	• Windows 10/8.1/8/7/Vista/XP SP3 or Mac OS X 10.3 or higher • Ethernet or Wireless network interface • Subscription with an Internet Service Provider (ISP) • Microsoft Internet Explorer 10 or higher, Edge 13 or higher, Firefox 36 or higher, Chrome 40 or higher, Safari 8 or higher, or other Java-enabled browser	
ADSL Features	• ADSL: ITU-T G.992.1, G.992.2, T1.413, G.994.1 • ADSL2: ITU-T G.992.3 • ADSL2+: ITU-T G.992.5	

VDSL Features	• ITU-T G.993.2
	  • Annex B (Europe) 998/997 band plans
	  • 8a, 8b, 8c, 8d (Central Office), 12a,
	    12b, 17a, 35b (Cabinet) Profiles
	  • POTS overlay
	  • Upstream Power Back-Off (UPBO)
	  • Dying gasp (50 ms)
	  • Bit swapping
		• ITU-T G.993.5
		• ITU-T G.998.4

PON Interfaces	• ITU-T G.984.x • FDA 21 CFR 1040.10 Class I • FDA 21 CFR 1040.11 Class I • IEEE 802.3 • FCC 47 CFR Part 15 Class B • ITU-T G.984.2 Amd1, Class B+	

Network Protocols	• RFC2684 multiprotocol Encapsulation
	  over ATM Adaption Layer 5
	• RFC1483 multiprotocol Encapsulation
	  over ATM Adaptation Layer 5
	• RFC2364PPP over ATMALL5 (PPPoA)
	• RFC2516 PPP over Ethernet (PPPoE)
	• RFC1662 PPP in HDLC-like Framing
	• RFC1332 PPP Internet Protocol Control Protocol
		• RFC1577/2225 Classical IP and ARP over ATM (IPoA)
		• RFC894A Standard for the Transmission of
		  IP Datagrams over Ethernet Networks
		• RFC1042A standard for the Transmission of
		  IP Datagrams over IEEE802 Networks
		• MER (a.k.a IP over Ethernet over AAL5)
		• Support ALG (Application Level Gateways)

Functionality

Routing Features	• RFC768 User Datagram Protocol (UDP) • RFC791 Internet Protocol (IP) • RFC792 Internet Control Message Protocol (ICMP) • RFC793 Transmission Control Protocol (TCP) • RFC826 An Ethernet Address Resolution Protocol (ARP) • RFC862 Echo Protocol • Support IP routing • Support for transparent bridging • Support for source and destination routing • Support for DNS as Client/Relay • Support for DNS fallback	• Support for DHCP server/client • Support for UPnP • Support for NAT, NAPT • Support for DMZ • Support for IP QoS • Support for IGMP proxy • Support for IPv6 • Support for VPN passthrough • IPSec, L2TP, PPTP client • Support for port forwarding • Support for Dynamic DNS

Media Transport and Control	• Multiple VoIP accounts
	• RTP / RTCP
	• G.711, G.729, G.726
	• T.38 FAX relay
	• SIP Proxy
	• Signaling
	  • SIP 2.0
	  • SDP
	  • In-band (voice encoded) or out-of-bond (over RTP) DTMF transport signaling
		• Supplementary Services
		  • CLIP, CNIP, CLIR
		  • CAll Forwarding
		  • Call Hold /l Resume
		  • Call Waiting / Call Transfer
		  • MWI
		  • Dial plan

Management Features	• Device Configuration, Management and Update • Web-based GUI • Embedded web server • Command Line Interface via Telnet or SSH • PSI configuration file upload and download	• Universal Plug-and-Play (UPnP) Internet Gateway Device (IGD v1.0) • WAN Management Protocol (TR-069) • Date/time update from ANTP Internet Time Server
Security Features	• Service access control based on incoming interface: WAN or LAN • Service access control based on source IP address • PAP (RFC1334), CHAP (RFC1994), MSCHAPv1, MSCHAPv2 for PPP session (PPPoE, PPPoA) • Stateful Packet Inspection (SPI) Firewall	• IP Fragment Overlap Protection Protects from DOS attacks from WAN: SYN flooding, IP surfing, Ping of Death, fragile, UDP ECHO (port 7), Tear Drop, Land, Smurf, Unreachable • IP filter, Parental control, Access Control • L2TP/PPTP/IPSeC embedded server

Physical

Dimensions	• 211 x 260 x 86 mm (8.3 x 10.2 x 3.4 in)	
Weight	• 680 g (1.5 lb)	
Power	• Input: 100 ~ 240 V	• Output: 12 V DC / 2.5 A
Temperature	• Operating: 5 to 40 °C (41 to 104 °F)	• Storage: -20 to 70 °C (-4 to 158 °F)
Humidity	• Operating: 10% to 90 % non-condensing	• Storage: 5 to 95% non-condensing
Certifications	• CE • RoHS	• Wi-Fi Certified • WPS Setup

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D-Link
Building Networks for People