

## Product Highlights

### Triple Play Applications

Provide multiple services through a single high-speed broadband connection to stream data, voice, and high-definition video services to a home

### Reliable Optical Fiber Connection

Fiber-optic hookup allows for a broadband connection to more remote homes not reachable by traditional DSL services

### GPON Technology for Huge Bandwidth

Delivers speeds of up to 2.4 Gbps for a broadband-connection that can provide users with blazing-fast Internet

## DPN-1452DG/J1

# Wireless AC1200 Giga port GPON Gateway

## Features

### Connectivity

- Fast 802.11ac wireless for high speed connections to all of your PCs and mobile devices
- Four Gigabit LAN ports to connect wired devices for high-speed online activities
- Optical fiber keeps the connection lightning-fast straight to the user

### Security

- Wi-Fi Protected Setup (WPS) to quickly and securely add devices to your network
- WPA/WPA2 encryption to secure your wireless traffic

### Application Support

- Voice service over 2 FXS ports
- VoIP (Voice over Internet Protocol)
- VPN (Virtual Private Network)
- Web browsing, e-mail, and instant messaging



The DPN-1452DG/J1 Wireless AC1200 Giga port GPON Gateway is a highly integrated router with everything your home or small business needs for high-speed Internet access. It combines an GPON router, Gigabit Ethernet Internet Port, USB support, Voice over IP (VoIP), and Gigabit wireless together in a single, easy to use product that shares an Internet connection for all your devices.

## Fast and Reliable Home Network

The D-Link DPN-1452DG/J1 Wireless AC1200 Giga port GPON Gateway creates a blazing fast home network that connects all of your devices to your broadband Internet connection. Concurrent dual-band 802.11ac brings you the future of high-bandwidth wireless connectivity, allowing you to stream HD video, make Internet voice calls, and surf the Internet from every corner of your home without interruption. Gigabit Ethernet ports provide high-speed wired connections for up to four PCs or other devices. It's stylish, easy to use, and provides you with a reliable network for today and tomorrow.

## Voice Over IP

The DPN-1452DG/J1 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 DPN-1452DG/J1 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 and secure online experience throughout your home or office.

## Smooth Streaming with Wireless AC

The DPN-1452DG/J1 uses the latest Wireless AC technology, which provides transfer rates of up to 1.2 Gbps<sup>1</sup> (866 AC + 300N). The router operates on both the 2.4 GHz and 5 GHz wireless bands at the same time using concurrent dual-band technology and three external antennas. 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.

### Designed for Optimal Wireless Coverage

The DPN-1452DG/J1's antennas have been carefully designed to ensure that you will get little to no dead space in any environment. The high-powered amplifier sends the signal into the farthest corners of your home. Furthermore, the Wireless AC1200 Giga port GPON Gateway's multiple external antennas improve wireless reception by bringing signals to where they are most needed to achieve the best possible performance.

### File Sharing Right at Your Fingertips

The DPN-1452DG/J1 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.

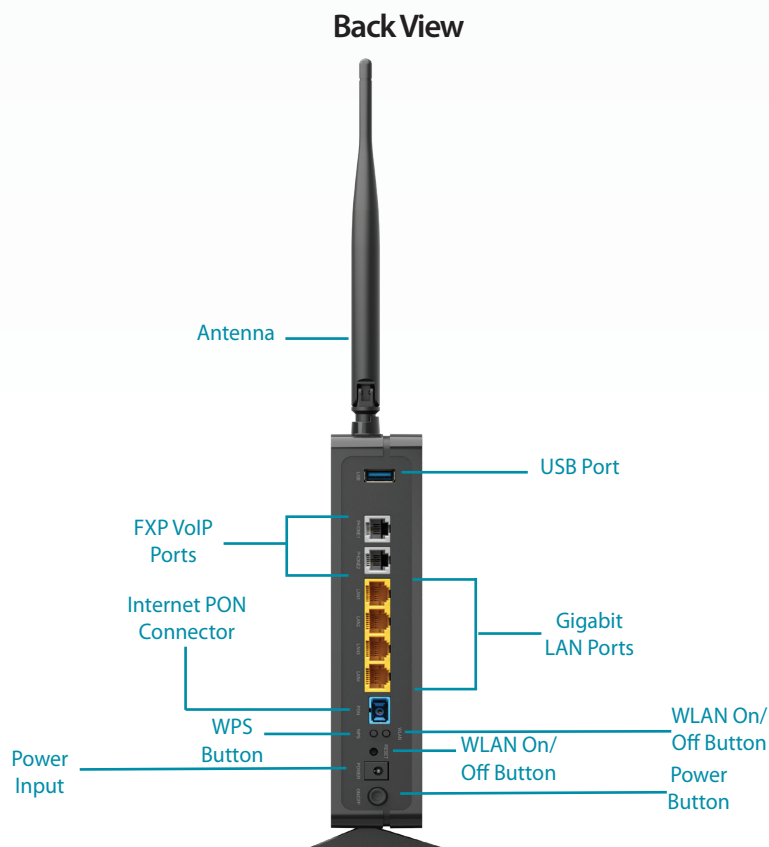
### Easy to Set Up and Secure

Setting up the DPN-1452DG/J1 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 a secure 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 a secure connection to a new device. Rest assured that your network is secure with WPA/WPA2 wireless encryption and built-in dual active firewalls (SPI and NAT) so you can shop online and do your online banking with confidence.

### Secure and Smooth Transmissions

The DPN-1452DG/J1 Wireless AC1200 Giga port GPON Gateway has built-in dual active firewalls (SPI and NAT) so you can shop online and do your online banking with confidence. It is also equipped with WPA wireless security and access control to 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 minimize traffic congestion and deliver smooth VoIP and streaming media, providing you with the best possible Internet experience.



**Technical Specifications**

**General**

GPON Features	<ul style="list-style-type: none"> <li>• ITU-T G.984.1, G.984.2, G.984.3, G.984.4</li> <li>• 8 T-CONTs and 32 GEM Ports Support</li> <li>• ITU-T I.610 OAM Principles &amp; Functions</li> <li>• FEC (Forward Error Correction)</li> <li>• 802.1p service mapping profile on U/S</li> <li>• Flexible mapping of GEM Ports into a T-CONT with priority queues based scheduling</li> </ul>	<ul style="list-style-type: none"> <li>• Multiple T-CONTs per device</li> <li>• Single T-CONT mode and Multiple T-CONTs mode</li> <li>• Automatic discovery for SN and password in conformance with ITU-T G.984.3</li> <li>• AES-128 Decryption with key generation and switching</li> <li>• DBA reporting in status indications in the PLOu, and by piggyback reports in the DBRu (mode 0)</li> </ul>
Antenna Configuration	<ul style="list-style-type: none"> <li>• 2 x 11n Internal antenna</li> </ul>	<ul style="list-style-type: none"> <li>• 2 x 11ac External antenna</li> </ul>
Data Signal Rate	<ul style="list-style-type: none"> <li>• 2.4 GHz<sup>1</sup></li> </ul>	<ul style="list-style-type: none"> <li>• 5 GHz<sup>1</sup></li> </ul>
WLAN Standards	<ul style="list-style-type: none"> <li>• IEEE 802.11b</li> <li>• IEEE802.11n</li> </ul>	<ul style="list-style-type: none"> <li>• IEEE 802.11g</li> <li>• IEEE802.11ac</li> </ul>
VoIP Features	<ul style="list-style-type: none"> <li>• FXS</li> <li>• RTP ( RFC 1889)/ RTCP ( RFC 1890)</li> <li>• SDP ( RFC 2327)</li> <li>• T.30 and T.38 Fax</li> <li>• Detection &amp; generation (RFC2833)</li> <li>• Echo Cancelling, Silence suppression, VAD, CNG</li> <li>• DTMF In band &amp; Out of band Tone</li> </ul>	<ul style="list-style-type: none"> <li>• SIP/ H248 Protocols</li> <li>• UDP ( RFC 768)</li> <li>• Multiple voice codec - G.711 (u/a-law), G.726, G.729 (A and B), G.723.1</li> <li>• Various CLASS services - Caller ID, Call Waiting, Call Forwarding, Call Transfer,</li> </ul>
Wireless Features	<ul style="list-style-type: none"> <li>• 64/128-bit WEP engine</li> <li>• AES-CCM/CCMP engine</li> <li>• WPA2 personal – PSK</li> <li>• 802.1x RADIUS</li> <li>• 802.11e WLAN QoS</li> </ul>	<ul style="list-style-type: none"> <li>• MAC address ACL</li> <li>• WPA-PSK</li> <li>• WPA2 Mixed Mode – PSK</li> <li>• EAP encapsulation over LANs w/ RADIUS client</li> <li>• WPS (Wi-Fi Protected Setup) 2.0</li> </ul>

**Functionality**

Security	<ul style="list-style-type: none"> <li>• Multiple IPSec/PPTP/L2TP pass-through</li> <li>• Built-in NAT firewall</li> <li>• Packet Filtering</li> <li>• Domain Blocking</li> <li>• Denial of Service prevention (DoS)</li> <li>• User Authentication PAP</li> </ul>	<ul style="list-style-type: none"> <li>• MAC Filtering</li> <li>• URL Content Filtering (keyword filtering)</li> <li>• Stateful Packet Inspection (SPI)</li> <li>• Intrusion Detection System/Log</li> <li>• User Authentication CHAP</li> </ul>
Quality of service(QoS)	<ul style="list-style-type: none"> <li>• ATM QoS</li> <li>• VLAN/PVC port mapping (bridge mode)</li> <li>• Port-based priority</li> <li>• Diffserv-Codepoint in TOS field (0~63)</li> <li>• User-defined priority (TCP/UDP/ICMP)</li> <li>• Bandwidth Control</li> </ul>	<ul style="list-style-type: none"> <li>• Traffic Classification/Prioritization</li> <li>• 802.1p (0~7) VLAN tag</li> <li>• Application port-based priority</li> <li>• Queuing/Scheduling: Round Robin; Weighted Round Robin(WRR); Strict Priority(SP)</li> </ul>
Network Protocols	<ul style="list-style-type: none"> <li>• 802.1q/1p VLAN over RFC2684 bridge encapsulation</li> <li>• PPPoE, PPPoE passthrough, PPPoE filtering of non-PPPoE packets between WAN and LAN</li> <li>• IpoE/MER</li> <li>• DNS Relay, DDNS</li> <li>• GMP snooping</li> </ul>	<ul style="list-style-type: none"> <li>• Network Address Translation (NAT), NAT ALGs</li> <li>• Ethernet as WAN</li> <li>• Dynamic Host Configuration Protocol (DHCP)</li> <li>• IGMP proxy</li> <li>• Simple Network Time Protocol (SNTP)</li> </ul>
IPv6	<ul style="list-style-type: none"> <li>• IPv6 Phase-II Logo: RFC 2460, RFC 4861, RFC 4862, RFC 1981, RFC 4443</li> <li>• 6to4 tunnel</li> <li>• Telnet, ftp, tftp, sshd, httpd</li> </ul>	<ul style="list-style-type: none"> <li>• RFCs (supported per request): RFC 4291, RFC 3315, RFC 2472, RFC 3633, RFC 4890, RFC 5095, RFC 4007, RFC 1981, RFC 2473, RFC 2462, RFC 3646, RFC 4541, RFC 3587, RFC 4193, RFC 2461, RFC 3596</li> </ul>

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Management Features	<ul style="list-style-type: none"> <li>• Web-based GUI configuration</li> <li>• Firmware upgrade, configuration data upload and download via Web-based GUI</li> <li>• TFTP server and client</li> <li>• Telnet/SSH access for configuration</li> <li>• UPnP IGD 1.0</li> <li>• ADSL/ADSL2/ADSL2+ manual selection and auto fallback</li> <li>• Log &amp; Trace function</li> <li>• SNMP v.1 and v.2c w/ MIB-I and MIB-II</li> </ul>	<ul style="list-style-type: none"> <li>• 1-level login control for local/remote management</li> <li>• TFTP for firmware, configuration files and image files upgrade and download.</li> <li>• Code Lock to prevent improper firmware upgrade through UI, TFTP, and TR-069 etc.</li> <li>• Local access via internal console pin (optional)</li> <li>• Configuration backup and restore</li> <li>• TR-069 compliant w/ ACS</li> </ul>
<b>Physical</b>		
Device Interfaces	<ul style="list-style-type: none"> <li>• GPON Port (SC Connector)</li> <li>• Four10/100/1000Mbps Gigabit Ethernet Ports (RJ-45 Connector)</li> <li>• One USB 2.0 port</li> <li>• Two FXS VoIP Ports</li> </ul>	<ul style="list-style-type: none"> <li>• Four10/100/1000Mbps Gigabit Ethernet Ports (RJ-45 Connector)</li> <li>• Power Button</li> <li>• Factory reset Button</li> <li>• WPS Button</li> <li>• Wireless On/Off Button</li> </ul>
LEDs	<ul style="list-style-type: none"> <li>• USB</li> <li>• L:AN1</li> <li>• LAN3</li> <li>• WPS</li> <li>• WLAN 5G</li> <li>• PON /LOS</li> </ul>	<ul style="list-style-type: none"> <li>• Phone</li> <li>• LAN2</li> <li>• LAN4</li> <li>• WLAN 2.4G</li> <li>• INTERNET</li> <li>• POWER</li> </ul>
Dimensions		
Weight		
Power	<ul style="list-style-type: none"> <li>• Input: 100 ~ 240 V</li> </ul>	<ul style="list-style-type: none"> <li>• Output: 12 V / 1.5 A</li> </ul>
Temperature	<ul style="list-style-type: none"> <li>• Operating: 0 to 40 °C (32 to 104 °F)</li> </ul>	<ul style="list-style-type: none"> <li>• Storage: -20 to 70 °C (-4 to 149 °F)</li> </ul>
Humidity	<ul style="list-style-type: none"> <li>• 5% to 95 % non-condensing</li> </ul>	
Certifications		
<b>Order Information</b>		
<i>Part Number</i>	<i>Description</i>	
DPN-1452DG/J1	Wireless AC1200 Giga port GPON Gateway	

<sup>1</sup> Maximum wireless signal rate derived from IEEE Standard 802.11ac, 802.11n, 802.11g, and 802.11b specifications. Actual data throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, and network overhead, lower actual data throughput rate. Environmental factors will adversely affect wireless signal range. Wireless range and speed rates are D-Link relative performance measurements based on the wireless range and speed rates of a standard Wireless G product from D-Link. Maximum throughput based on D-Link 802.11ac devices.

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