

## 4/8-Port VoIP Trunk Gateways

- Connects Remote IP Phone Network to 4 or 8 Local Analog Phone Lines
- Voice Compression Format to Save Internet Bandwidth
- Real-Time/Toll-Quality Voice
- Integrated 4-Port Switch/Broadband Router

### FEATURES

#### VoIP trunk

- 4 or 8 FXO Ports
- Compatible With SIP Services
- Extensive Call Feature Support
- Guaranteed Toll-Quality Voice Even in Busy Network

#### Call Features

- Call Hold, Wait, Forward, Transfer
- Speed Dialing, Repeat Dialing, 3-Way Conference
- Greeting Message, Caller ID Delivery
- Easy Tracking With Call Detailed Records

#### WAN/LAN Connection

- 10/100Mbps Ethernet WAN Port
- 4 10/100Mbps Ethernet LAN Ports
- WAN Connection Supports PPPoE, DHCP Client, DDNS

#### Configuration/Upgrade

- Easy Configuration by IVR or Web-Based GUI
- Web-Based Firmware Upgrade

#### Built-in Router/Firewall

- DHCP Server for Automatic IP Assignment
- IP Sharing for Multiple Users Access Via Single IP
- NAT Firewall, DoS Attack Prevention

The D-Link DVG-6004S/DVG-6008S VoIP trunk gateways connect an IP network to POTS (plain old telephone service) analog lines to send IP voice and data to the conventional phone sets and fax machines. Designed as a cost-effective VoIP solution for a small to medium-sized business and the branch office, these devices provide 4 or 8 FXO (Foreign eXchange Office) ports for 4 or 8 phone line connections. IP network connection can be through any of the 4 LAN ports or the WAN port (all 10/100BASE-TX Ethernet interfaces).

*For Office Use.* In a remote IP phone to local analog phone line application, a branch office can take in IP voice calls from a head office, then route them to local destinations equipped with only analog phones. The remote office pays only for the local analog phone time. The gateways connect analog callers to the IP network without involving operators or incurring toll charges from telephone companies.

*The DVG-6004S/DVG-6008S VoIP gateways can be deployed to interface VoIP infrastructure with a Public Switched Telephone Network (PSTN).* They allow analog phone callers to place calls through the long-distance trunk line. The gateways accept dial tone and ring current from the connected equipment, and facilitate the use of conventional phone sets and fax machines on a VoIP network.

*Guaranteed Voice Quality.* The DVG-6004S/DVG-6008S gateways deliver clear sound, voice and reliable fax calling through implementation of internationally recognized standards for voice and data networking. They incorporate Quality of Service (QoS) functions to ensure that voice received through is the same as or even surpasses that received on the ordinary phone.

*Convenient Call Features.* The DVG-6004S/DVG-6008S gateways support extensive call features, allowing the service providers to offer these functions to their subscribers. Provided that the telephone sets at the end-users side support these functions, callers can take advantage of these convenient features. Configuration of individual phone connection is easy, using the multi-language Interactive Voice Response (IVR) or the web-based user's interface.

*Shared Broadband Connection/Integrated 4-Port Switch.* The gateways provide a convenient router function to permit office users to share the broadband line. With 4 integrated Ethernet ports, office computers can readily connect to these gateways and use their built-in NAT/DHCP server functions for automatic logon.



▪ DVG-6004S  
4-Port Gateway



▪ DVG-6008S  
8-Port Gateway

## Technical Specifications

### VoIP

#### Analog Interface

- DVG-6004S: 4 RJ-11 FXO ports
- DVG-6008S: 8 RJ-11 FXO ports
- Loop start signaling protocol
- Reversed polarity detection

#### Voice Features

- SIP (RFC3261) compatible
- SIP method: ACK, BYE, CANCEL, INFO, INVITE, NOTIFY, OPTIONS,
- PING, PRACK, PUBLISH, REFER, REGISTER, SUBSCRIBE, UPDATE
- SIP Extension: Session Timer (UPDATE or re-INVITE), Proxy Required, P-Asserted (RFC3325), MWI (RFC3842)
- Voice CODEC: G.711 a/u law, G.726, G.729A, G.723.1
- CNG (Comfort Noise Generation)
- VAD (Voice Activity Detection)
- Silence suppression/detection
- G.165/G.168 echo cancellation
- Adaptive Jitter Buffer and programmable Gain Control
- In-Band DTMF, Out-Of-Band DTMF relay (RFC2833, SIP INFO)
- Multiple SIP Proxy server entries with fail-over mechanism
- T.30 (G.11) / Real time T.38 / Secured T38 FAX relay
- DTMF, FSK (Bellcore & ETSI) Caller ID detection and generation
- Caller ID Restriction (CLIR) support
- FXO hang up detection: Busy Tone cadence auto learning/detection
- Single Number / Account for multiple ports
- Group hunting function
- Digit Map
- E.164 Numbering & ENUM support
- Recordable greeting message
- Hot-Line, Warm-Line support

### Call Features

- Call Hold, Call Waiting, Call Pickup
- Call Forward - Unconditional, Busy, No Answer
- Call Transfer - Unattended, Attended
- Speed Dialing, Repeat Dialing, Three Way Calling (Media Server required)

### IP Network

#### WAN Port

- RJ-45 10/100BASE-TX Ethernet port supporting Nway auto-negotiation, auto-detection/adjustment of MDI/MDIX
- Static IP, PPPoE, PPTP, Bigpond Cable and DHCP address assignment support
- QoS: IP TOS (IP Precedence), DiffServ, Port Priority
- NAT traversal: STUN, UPnP, OUTBOUND PROXY
- Pass-through NAT
- NAP: (Network Time Protocol RFC 1305), accepts up to 3 Time Servers Time Zones
- DDNS: DynDns.org, TZO, PeanutHull, 3322.org.
- RTP Packet Summary: packet sent, packet received, packet loss
- MAC address clone

#### LAN Ports

- 4 RJ-45 10/100BASE-TX Ethernet ports supporting NWay auto-negotiation, auto-detection/adjustment of MDI/MDIX
- NAT/PAT, DHCP Server, DMZ, Virtual Server, MAC/IP/port-based filtering
- QoS: port based priority (Hi/Low) with rate limit
- Router or Bridge Mode

### DoS Prevention

- Attack prevention based on TCP, UDP, IP, ICMP protocols
- Prevents SYN Flood, IP Spoofing, Ping of Death, Tear Drop DoS attacks

### Operation & Maintenance

#### Management/Configuration

- Web-based & Telnet user interfaces with password authentication
- Configuration, port status, registration status, hardware/software information in web-based & Telnet UI
- IVR (Interactive Voice Response) configuration engine
- Reset button (factory default setting restoration)
- Optional Auto Provisioning Server (APS) for mass deployment with less dispatch
- SNMP v.1/v.2c support
- Ping test

#### Diagnostic LEDs

- Voice ports
- WAN port
- LAN ports
- Run
- Power
- Alarm

## Physical & Environmental

### Power Input

- DC 12V
- Through AC 100V to 240V 50/60Hz input power adapter

### Dimensions

- DVG-6004S: 202 x 172 x 35 mm
- DVG-6008S: 302 x 179 x 45 mm

### Weight

- DVG-6004S: 430 grams
- DVG-6008S: 1.2 kg

### Operating Temperature

0° to 45°C

### Storage Temperature

-25° to 75°C

### Operating Humidity

Up to 90%RH, non-condensing

### Safety

- UL



### Certification

- FCC Class B
- CE

## D-Link Worldwide Offices

<b>U.S.A.</b>	TEL: 1-800-326-1688	FAX: 1-866-743-4905	<b>Luxemburg</b>	TEL: 32-(0)2-517-7111	FAX: 32-(0)2-517-6500
<b>Canada</b>	TEL: 1-905-8295033	FAX: 1-905-8295223	<b>Poland</b>	TEL: 48-(0)-22-583-92-75	FAX: 48-(0)-22-583-92-76
<b>Europe (U. K.)</b>	TEL: 44-20-8731-5555	FAX: 44-20-8731-5511	<b>Hungary</b>	TEL: 36-(0)-1-461-30-00	FAX: 36-(0)-1-461-30-09
<b>Germany</b>	TEL: 49-6196-77990	FAX: 49-6196-7799300	<b>Singapore</b>	TEL: 65-6774-6233	FAX: 65-6774-6322
<b>France</b>	TEL: 33-1-30238688	FAX: 33-1-30238689	<b>Australia</b>	TEL: 61-2-8899-1800	FAX: 61-2-8899-1868
<b>Netherlands</b>	TEL: 31-10-282-1445	FAX: 31-10-282-1331	<b>India</b>	TEL: 91-022-26526696	FAX: 91-022-26528914
<b>Belgium</b>	TEL: 32(0)2-517-7111	FAX: 32(0)2-517-6500	<b>Middle East (Dubai)</b>	TEL: 971-4-3916480	FAX: 971-4-3908881
<b>Italy</b>	TEL: 39-02-2900-0676	FAX: 39-02-2900-1723	<b>Turkey</b>	TEL: 90-212-289-56-59	FAX: 90-212-289-76-06
<b>Sweden</b>	TEL: 46-(0)8564-61900	FAX: 46-(0)8564-61901	<b>Egypt</b>	TEL: 202-414-4295	FAX: 202-415-6704
<b>Denmark</b>	TEL: 45-43-969040	FAX: 45-43-424347	<b>Israel</b>	TEL: 972-9-9715700	FAX: 972-9-9715601
<b>Norway</b>	TEL: 47-99-300-100	FAX: 47-22-309580	<b>LatinAmerica</b>	TEL: 56-2-232-3185	FAX: 56-2-232-0923
<b>Finland</b>	TEL: 358-9-2707 5080	FAX: 358-9-2707-5081	<b>Brazil</b>	TEL: 55-11-218-59300	FAX: 55-11-218-59322
<b>Spain</b>	TEL: 34-93-4090770	FAX: 34-93-4910795	<b>South Africa</b>	TEL: 27-12-665-2165	FAX: 27-12-665-2186
<b>Portugal</b>	TEL: 351-21-8688493		<b>Russia</b>	TEL: 7-495-744-0099	FAX: 7-495-744-0099 #350
<b>Czech Republic</b>	TEL: 420-(603)-276-589		<b>Japan</b>	TEL: 81-3-5781-0963	FAX: 81-3-5781-0965
<b>Switzerland</b>	TEL: 41-(0)-1-832-11-00	FAX: 41(0)-1-832-11-01	<b>China</b>	TEL: 86-10-58635800	FAX: 86-10-58635799
<b>Greece</b>	TEL: 30-210-9914 512	FAX: 30-210-9916902	<b>Taiwan</b>	TEL: 886-2-6600-0123	FAX: 886-2-6600-8168
			<b>Headquarters</b>	TEL: 886-2-6600-0123	FAX: 886-2-6600-9898