

**Model Name:**

**DVG-2016S/2032S/3016S/3032S**

**VoIP Gateway**

**External Specification Version**

**Version: 1.0**

**2006/01/17**

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## 1. Product Descriptions

D-Link Corporation is considering upgrades DVG-2016S/2032S/3016S/3032S of its VoIP Gateway potential usage in the 1Q 2006. Below is the baseline engineering specification for the product. Exceptions to the D-Link-requested minimum specifications should outline advantages your proposed alternative design can add to quality, cost, time to market, performance, manufacturability, etc. List all assumptions made, including any exceptions to D-Link's requirements and if necessary, attach additional documentation to support your response. A full hardware (and software, if applicable) specification along with a schematic, costed bill of materials, mechanical drawing, and development schedule (showing all milestones: test, validation, regulatory approvals, etc.) should accompany your quotation.

## 2. Product Features

### 1.1.1.1 WAN Access Types:

DHCP client

PPPoE client

Static IP address

PPTP

BigPond Cable (Australia)

### 1.1.1.2 Support MAC Cloning on WAN port

### 1.1.1.3 Bridge and Router mode

### 1.1.1.4 Router mode features:

DHCP Server

Virtual Server

Port Triggered Special Application

DMZ

Port Filter

IP Filter

MAC Filter

URL Filter

RIP I & II

Static Route

DDNS – DynDns.org, TZO, 3322.ORG, Peanut Hull

NAT Traversal – Pass-through NAT, STUN client, UPnP Control Point

### 1.1.1.5 Support NTP

### 1.1.1.6 Phone Book Manager Server (selected version), up to 200 IAD registration

### 1.1.1.7 Phone Book Manager Client

### 1.1.1.8 DoS prevention engine inbuilt (configurable)

## **1.1.1.9 QoS features:**

SIP and RTP always first policy

WAN access rate control

IP Precedence, DSCP (DiffServ) tagging on SIP and RTP packets

LAN port rate limit, hi/low queue control

## **1.1.1.10 SIP Features:**

By Port registration

By IAD registration

Mixed configuration of “By Port” and “By IAD” on the same IAD

Outbound Proxy

Session Timer: Update, Re-Invite

E.164 Numbering

Redundant SIP PROXY support (failover by registration)

SIP PING (on special version)

Adjustable NAT port binding interval (bind with Proxy)

CLIR (anonymous Caller ID)

Hot line / Warm line

FXO dial out prefix

Group hunting, configurable hunting sequence

Support one-way media (SIP 183)

Call Hold

Call Waiting

Call Transfer – attended, unattended

Call Forward – unconditional, busy, no answer

3-Way Calling – Compatible with NORTEL MCS5200 (on special version)

T.30 FAX pass-through

T.38 FAX relay

Adjustable FAX TONE detection level

Out-of-band DTMF – RFC2833, SIP INFO

## **1.1.1.11 Telephony Features:**

G.711 a/μ, G.726(32K), G.729A, G.723.1

Adjustable jitter buffer

Adjustable packet time (by Codec type)

Silence Detection and Suppression

Echo Cancellation

Digit Map defines number length by leading digits, route assignable

Local phone book enables calling to other VoIP device without registration

Speed Dial

Caller Filter accept/deny caller by IP address  
On machine recordable prompt message  
Prefix replacement, removal while dialing out from FXO  
Reject dial-out through FXO by prefix  
FXS Caller ID Generation: DTMF, FSK (Bellcore/ETSI)  
FXO Caller ID Detection: DTMF, FSK (Bellcore/ETSI)  
End of digit tone (inform user complete codes accepted)  
Force calling PSTN code (for IAD with mixed FXS and FXO)  
Configurable dial-way timeout/inter-digit timeout/DTMF on-off length  
Adjustable listening & speaking volume (-6 ~ +6)  
Adjustable tone volume (1~5)  
Adjustable FLASH time

## **1.2.12 Management:**

WEB & TELNET  
By Provision Server (selected version only)  
Two privilege WEB login account  
Three WEB languages by default – English, TC, SC  
System Information shows device status and registration status  
Per call RTP packet summary  
PING test  
STUN inquiry

## **Mechanic & ID Design**

### **2.1.1 Outlook**

Unavailable

### **2.1.2 Case**

19" 1U Rack size

## **2.2 Physical & Environment**

### **2.2.1 Power input**

- DC 12V/ 1.25A, External Power adapter

### **2.2.2 Operation Temperature**

- 0-40°C

### **2.2.3 Storage Temperature**

- -10-55°C

### **2.2.4 Humidity**

- 5 ~ 95% non-condensing

## **3. Emission (EMI) Certifications:**

- FCC class B, CE mark class B

## **4. Safety Certifications :**

- UL / CUL / EN60950