

# DAG3000 FXS Analog VoIP Gateway

### Overview



DAG3000 is a multi-functional analog gateway offering seamless connectivity between IP-based telephony networks and legacy telephones (POTS), fax machines and PBX systems. It adopts modularized hardware design that allows to expand FXS ports by adding boards according to user's requirements. Each board has 8 FXS ports and the gateway supports 112 FXS ports at maximum. DAG3000 supports the standard SIP protocol and it's compatible with leading IMS/NGN platforms and SIP-based IP telephony systems. It is ideally suited for small and medium businesses, call centers and multi-location environments that need VoIP services.

## Key Features

- High density gateway, up to 112 FXS, 5KM Maximum Cabling Length
- Fax over IP (T.38 compliant Group 3 Fax Relay up to 14.4kpbs and auto-switch to G.711 for Fax, Pass-Through, Fax data pump V.17, V.21, V.27ter, V.29 for T.38 fax relay)
- Modularized design, easy to expand
- Support IPv4 and IPv6, Multiple codecs: G.711A/U,G.723.1,G.729A/B, iLBC, AMR
- Elastix/Broadsoft Certification
- Fully compatible with leading IMS/NGN, SIP based IP telephony system

#### **Expert of Smart Gateways**

# **Honesty Concentration**

### **Physical Interfaces**

- Capacity
  Range from 8 to 112 FXS
- SIU Board
  2\* RJ45 connector with 8 FXS
  Support 14 SIU Boards
- MPU Board
  1\*RS232, 115200bps
  4\*10/100M BaseT Auto MDIX, RJ45
  - Support 2 MPU Slots

### Voice & FAX

- G.711A/U law (V17, V21, V 27 ter, V29), G.723.1,
   G.729A/B/E,G.726,iLBC,AMR
- Silence Suppression
- Comfort Noise Generation(CNG)
- Voice Activity Detection(VAD)
- Echo Cancellation(G.168), with up to 128ms
- Adaptive (Dynamic) Jitter Buffer
- Hook Flash
- Programmable Gain Control
- T.38/Pass-through
- Modem/POS
- DTMF mode: Signal/RFC2833/INBAND
- VLAN 802.1P/802.1Q
- Layer3 QoS and DiffServ

### FXS

- Connector: RJ45 with 4 FXS
- Dial Mode: DTMF and Pulse
- Pulse: 10 and 20 PPS
- Caller ID: DTMF/FSK CLI Presentation
- Max Cable Length: 5KM
- Reversed Polarity
- Programmable Call Progress Tone

### VoIP

- Protocol:
- TLS / SRTP
- SIP v2.0 (UDP/TCP),RFC3261
  SDP,RTP(RFC2833), RFC3262, 3263,3264,3265,3515,2976,3311
- RTP/RTCP, RFC2198, 1889
- RFC4028 Session Timer
- RFC3266 IPv6 in SDP
- RFC2806 TEL URI
- RFC3581 NAT,rport
- Primary/Backup SIP Server
- Outbound Proxy
- DNS SRV/ A Query/NATPR Query
- SIP Trunk
- Early Media/Early Answer
- NAT:STUN, Static/Dynamic NAT

# DINSTAR

# **Innovation Open-mind**

# Supplementary Service

- Call Waiting, Call Hold
- Blind Transfer, Attend Transfer
- Call Forward on Busy / No Reply / Unconditional
- Warm/Immediately Hotline
- Do-not-disturb
- 3-Way Conference
- Message Waiting Indicator

# Software Features

- Hunting Group
- Web ACL
- Telnet ACL
- Action URL
- PPPoE/IPv4/IPv6
- Digitmap
- Bandwidth Optimization
- Routing Rules based Prefixes
- Caller/Called Number Manipulation

# **Network Features**

- Network Protocol:
  - TCP/UDP, RTP/RTCP,
  - HTTP/HTTPS,
  - ARP, ICMP, DNS, DHCP, NTP,
  - TFTP, TELNET, PPPoE, STUN,
  - Static/dynamic ARP
- IPv4/IPv6, static/dynamic IP
- DHCP Client/PPPoE

# Maintenance

- SNMP v1/v2/v3
- TR069
- Auto Provisioning TFTP, HTTP, HTTPS,
- Web/Telnet
- Configuration Backup/Restore
- Firmware Upgrade via Web
- CDR
- Syslog
- Ping/Tracert Test
- Network Capture
- Outward Test(GR909)
- NTP/Daylight Saving Time
- IVR local Maintenance
- Cloud-based Management

## Environmental

- Power Supply: 100-240VAC, 50-60 Hz
- Power Consumption:124W MAX
- Operating Temperature:0 °C ~ 45 °C
  Storage Temperature: -20 °C ~80 °C
- Humidity:10%-90% Non-Condensing
- Dimensions(W/D/H): 440\*320\*135mm(3U)
- Unit Weight: 7.0kg
- UL certificated
- Compliance: CE, FCC

Shenzhen Dinstar Technologies Co., Ltd. www.dinstar.com

#### **Expert of Smart Gateways**