SKYLIANCE NETWORK

Skyliance Network
Skylink Gateway Series
Standard-based VoIP/FoIP Trunk Gateway for Carriers and Enterprises

SKYLINK DIGITAL TRUNK GATEWAY

TRUNK Gateway

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Skylink Trunk Gateway is a cost-effective and reliable Digital Voice over IP (VoIP) Gateway/IAD that offers **high-density** and **toll quality voice/fax over IP networks**.

With its embedded architecture, the Gateway is ideal for VoIP applications associated with Carrier environments.

The Gateway equipped with high-density **programmable digital trunk (E1) interface** to interwork with **Digital Exchanges, Switches, Remote line units,** while **QoS enabled** network interface to ensure packet delivery for superb voice quality.

Trunk Gateway utilizes advanced VoIP and FoIP technologies, including Dynamic voice coders and fax algorithms, Echo cancellation, Voice Activity Detection (VAD), Comfort Noise Generation (CNG), and robust packet recovery algorithms to ensure optimal voice/fax quality over ever-changing network.

With its built-in user-friendly interface, Media Gateway may be configured easily from consoles/telnet command interface, and **integrated with network management centers** to enable remote configuration.

With the flexible hardware architecture, the gateway is ready to support **various type of VoIP signaling and features over remote software upgrade**.

FEATURES AND BENEFITS

- Standard-based (H.323, SIP and MGCP-upgradable) VOIP/FOIP TRUNK Gateway

- Support max. 16 E1 digital trunks (480 channels) with ETSI-compliant V5.2 signalling

- Ideal for TDM network replacement with VOIP for Network Switch and Remote line units

- Real-time Voice and Fax over IP supporting (ITU-G.711/729ab/723.1, T.38) with **QoS (DiffServ)** supported

- Dynamic multiple voice coder support

- Advanced telephony features to optimize media quality against bandwidth, including

  - H.450.x feature call supports
  - Programmable line impedance
  - Customizable Network Tone Generation
  - Programmable Network Tone Detection,
  - DTMF relay over data network (H.323v2 & IMTCv1 UII format),
  - Comfort Noise Generation,
  - Tunable Gain Control
  - Voice Activity Detection for bandwidth conservation

- Built in routing-plan and Gatekeeper support for intelligent call routing

- Remote management via serial, console and telnet

- Support remote system software upgrade through data network

- Support telecom network power

Technical Specifications

Features:

Telephony Interface:

Physical Interface	Digital Trunk per ITU-T (G.703) 2.048Mbps requirement
Signaling	V5.2 Switch/PBX signaling
Trunk Interfaces	Line Impedance: 120Ω Line rate:2.048Mbps ± 50 ppm
Others	Coding: HDB3 Coding. Encoding Law: A Law. Frame Structure: ITU-T G.704. DNIS and ANI extraction

Data Network Interface:

Physical Interface	1 10/100Base-T, RJ 45 TCP/IP on Ethernet (NAT supported)
Protocols	H.323 (Normal/Fast-start mode, H.245 Tunneling), SIP MGCP / MEGACO/H.248 (Software Upgradable)
Voice coders support	H.450.x Call Features (e.g. Call Transfer, Call Waiting) support Support Direct and Gatekeeper routing mode ITU-T G.711 u-law, G.723.1, and G.729A/B, auto-switching (Frame-rate: 1 – 8 / packet)
Fax	Support T.30 G3 fax on PSTN Interface ITU-T T.30 Fax Spoofing over IP ITU-T T.38 Real-time FaxOverIP

Others:

Simultaneous connections	Max. 480 channels voice/fax from modular digital trunk interface
Media processing	Automatic Gain Control G.168 Echo Cancellation (16 ms) Voice Activity Detection (VAD) with Comfort Noise Generation (CNG) Call Progress Detection DTMF Detection/Filtering/Regeneration (H.323v2 / IMTCv1)
Call Control	Built-in 3-tier Dialing Plan and destination hunting Support Gatekeeper authenuation, authorization and accounting, routing control and gateway mapping
Management	Call Accounting Information on Gateway (via RS232) or Gatekeeper RS-232 (DCE mode) Built-in TELNET and HTTP Web-based remote management Support external SNMP agents for active polling
System Upgrade	Flash memory and built-in TFTP allowing firmware and feature upgrade via network
System Architecture	Standard Arm-based Processor and DSPs Flash Memory, with Programmable Line/Station Interface
Chassis	17.8cm x 48.5cm x 25.4cm (H x W x D)

System Specification:

Data Network	Standard 10/100-BaseT Ethernet RJ-45 interface
Voice Network	Digital Trunk Interface (E1) per ITU-T G.703 specification
Power Requirement	Power Supply Unit -42 to -63 V DC@4 Amp.Max.
Operating Environment	Operating temperature: 32 to 122 F (0 to 50 C)
	Storage temperature: 14 to 140 F (-10 to 60 C)
	Relative humidity: 10% to 95% (noncondensing)
Compliance	CE
	FCC part 15 A
	FCC part 68
	EMC Certification

Typical Usage Models

BundledVoiceoverBroadbandwithServiceProvider

PABX/ Key line

Sky link Gateway

Mobile/ Telephone Network

ISP / Service Provider (Internet)

Country- A

Country- B

Country- N

InexpensiveVOIP/FOIPcall -replaceexpensivelongdistancecall