Delta Plus Hybrid VoIP Gateway

In hybrid VoIP & TDM era with diverse and rapidly-growing needs of unified communications and service, Delta plus VoIP Gateway adopts the latest modular architecture with built-in server, and opens a new milestone to maximize VOIP and TDM network's value for SP and application developers. Interface with FXO, FXS, T1, E1 and IP to deliver a cost-effective and comprehensive VoIP solution.

Delta Plus is composed of multiple components, includes DSP Board, power supply, User Cars and the boards are 16-channel analog boards,4E1 digital boards

Key Features and Benefits

- **Flexible configuration for any network**

Compliant with diverse networks (FXO, FXS, T1, IP): support various multimedia processing capability (conferencing, fax, compression and Super TM echo cancellation for voice enhancement and an array of Protocols (SIGTRAN, ISDN PRI, CAS, SS7, V5.2, Q.SIG, R1, R2)

- **Compliant with any IP-Based applications**

With optional inbuilt industrial server, Delta Plus series are compliant with any IP-based applications; it also even supports any category of third party software, including UC, IP-PBX, Contact Center and more. In legacy PSTN network, Delta Plus could converge applications via internal modules

- **Low to High Scalability**

Modular architecture ensures flexibility and expandability from low density and high density. Modular design allows for easy configurations, system upgrading or general maintenance

- **Multimedia Convergence**

Adopt 1000M-Ethernet switching chipset, Delta Plus's media stream exchanges in IP packets, and access to soft switching system via Media Gateway Controller, ensuring high-level applications are streamlined

- **Diverse Media Resources**

Support high-capacity voice playback and Codecs, conferencing, faxing; Support T.38/T.30; optimized for IP-PBX, IVR and ACD applications, with EXT IVR server or GUI management

- **Carrier-Grade Reliability**

Special power system with standby redundancy; advanced cooling system to reassure long-standing robustness ; special air cleaner to protect against dust accumulation inside chassis; Inside temperature control and alert system; No need to change wiring when changing functional modules

Technical Specification

Functional module available:

DP16: 16*FXO, 16*FXS, or hybrid 8*FXS+8*FXO

DP-30(1E1), DP-60(2E1), DP-120(4E1)

Notice: a total of 5 slots for all these modules

Optional inbuilt server to run applications:

Option 1: DP-CPU01

Powerful Intel（R) J1900 Processor, 2MB L2 cache, 64-bit instruction, Up to 8GB RAM

Multimedia & Signaling

Voice Processing

CODECs: support A-law, μ-law, PCM8, PCM16, IAM-ADPCM, VOX, MP3, GSM, G.729A/B,G.722,G.723, iLBC etc.

Voice file format: support standard WAV format file and any non-format file;

Support conversion among various (de)coding formats;

Support real-time file replay from RAM and server;

Support real-time recording to RAM and server (Dynamic Storage); Support DTMF and FSK transmission/reception;

Support simultaneous recording/replay;

Compliant with G.168 echo cancellation, with up to 128ms tail length; Support AGC/ALS;

Support voice call recording (on-demand or permanent);

Two voice channels could be converted to a fax session on demand;

Allow DTMF tone transmission/detection in three modes: inner-band/SIP-INFO/out-of-band (RFC2833);

Inner multiple-threads mechanism;

Conference/Fax resource

Support distributed conferencing mode, with conferencing resource in each voice channel;

Fully support SIP-based Fax T.38 standard;

Support V29/V27/V17 standards, with faxing rate up to 33.6Kbps

(Automatically slowing down);

Support ECM (Fax/Error Correction Mode) for reception/transmission

(Optional for EXM/non-ECM mode);

Support TIFF files input in MH/MR/MMR format and transmission/reception in MH, MR format;

Network Interface

E1 interface: Compliant with G.703, including 75Ω unbalanced interface and 120Ω balanced interface;

T1/J1 interface: DSX-1 and CSU line compensation available for different extents of signal losses, including 100Ω and 110Ω balanced interfaces;

Analog interface: Optional functional modules for FXO interface, FXS interface or high-impedance logging;

2 *LAN Ethernet (RJ-45);

Physical Characteristics

Dimensions: 2U form factor: 88.1mm (H) x 482.6mm (W) x 430mm (L) Net Weight: about 8Kg (different for the number of optional modules)

Power Requirement

AC: 90-120V or 200~265V (SELECT RIGHT RANGE ON SHELF), Frequency: 50~60Hz;

Power consumption: different for configuration, less than 350Watt;

Environment Requirement

Ventilation: normal;

Operating temperature: 0℃℃40℃;

Relative humidity: 10%℃85%;

Avoid dust accumulation;

Anti-electrostatic: please grounded;

Installation recommendation: mounted on standard 19-inches rack; Anti-electrostatic: please grounded;

Installation recommendation: mounted on standard 19-inches rack;

Quality and Warranty

ISO 9001:2000

Functional Module: 1-years

CPU (including motherboard): 1-year

5 Years after Sales Service

About Delta

As a major manufacturer and supplier of communication products and solutions, Delta specializes in providing superior Multimedia Gateway, Integrated Multimedia Switch, and Telephony Hardware in use for Telecom communications. www.psdelta.com

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