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KDV8000EMultipoint Control Unit (MCU)

This HD + SD and fully integrated powerful MCU assures you to enjoy a high quality of IP based videoconferencing communication.



KDV8000E is a high performance and fully integrated Multimedia Conference platform, which combines the latest technologies in video, audio and network transmission. This unique in-the-market MCU supports HD and SD resolution videoconference with fully integrated services such as Gatekeeper, firewall traversal and T.120, no need of any additional device or server in any IP network environment. No matter through Internet, VPN (Virtual Private Network) or leased lines, KDV8000E performs cost-effectively with the most concise architecture to replace the conventional "platform + additional servers" structure. KDV8000E supports efficient H.264 video codec technology and H.239 dual video stream, it also provides powerful media processing capabilities such as N+1, N+2 and N+3 style Continuous Presence and Intelligent Audio Mixing from 32 sites. After all, KDV8000E gives you a full variety of application features for your videoconferencing exercise.



• Quality Conference Result

With efficient H.264 video codec and wideband audio processing technologies, KDV8000E can manage HD and SD image resolutions for videoconferencing effect and support H.239 dual video streaming standard, which allows multiple sites to share PC images with resolution of up to 1024×768 .

• Flexible Access Capacity

KDV8000E is configured of access capacity of 8 \sim 64 channels, with convention of 16 group meetings at the same time. Each access node supports a streaming bandwidth up to 4 Mbps with capability to adapt different calling rate automatically. It is very suitable to multiple access networks with different bandwidth conditions such as the Internet, VPN, leased lines and LANs.

• Excellent Network Adaptability

With the embedded proxy service with standard of H.460 protocol, KDV8000E supports NAT/firewall traversal and allows deploying endpoints at any place without interference of network security policies. Using Intelligent Packet Loss Recovery (IPLR) and QoS technologies, KDV8000E ensures operation stability under various network environment. Even through a home use ADSL access from a remote site, the video and audio qualities you can get for your conference can also be maintained very satisfactory.

• Innovative Multi Service Provider Access Bridge

KDV8000E is capable to be connected simultaneously by multiple Internet Service Providers as a network bridge, which helps solving the bottleneck issues between different Service Providers caused by geography and commercial competition. Embedded within the machine, this function can maximize effective bandwidth and speed from each remote site, and no additional server is required.

• Powerful Conference Features

With uniquely rich layouts of up to 16 sites in Continuous Presence and powerful function of Intelligent Audio Mixing, KDV8000E supports a perfect interactive conference with each party. Conference Template and Conference Booking Service allow you to originate a conference with number of participants and various preset parameters, anytime just by simple button click. Also, Virtual Conference can be accessed by calling a number without any preset of participants. Furthermore, you may use Meeting Control Console (MCC), a friendly GUI software for a complete conference management.

Cost Effective and Protect Investment

No matter with software or firmware platforms, both are fully integrated with service functions such as Gatekeeper (GK), firewall traversal proxy and T.120, KDV8000E is considered as an All-in-One solution for functions usually realized by several third party devices or servers. Thus, your system setup and maintenance cost will be tremendously reduced. Since the system can be easily upgraded through software to a higher version in terms of capacity, protocols and features, your investment is surely protected.



KDV8000E Multipoint Control Unit (MCU)

Technical Specifications

Standards Followed

System standard: H.323, SIP
Video standard: H.263, H.263+, H.264
Audio standard: G.711 G.722.1 Annex
C/Polycom® Siren14TM G.728
Dual video standard: H.239

Network protocol: TCP/IP , Telnet, HTTP, FTP, $\ensuremath{\mathsf{TTP}}$

SNMP, DHCP, RTP/RTCP

Other standards: H.225, H.231, H.235, H.241, H.242, H.243, H.245, H.281, H.460, T.120

System Capacity

Eleven selective configurations: 8, 12, 16, 20, 24, 28, 32, 40, 48, 56, and 64 users
Supporting a maximum of 16 groups of conferences at the same time

Network Interface

One single 10/100Mbps interface and two 10/100/1000Mbps interfaces

Conference Rate

Up to 4 Mbps

Video Resolution

720P (1280×720) 4CIF (704×576)

CIF (352×288)

QCIF (176×144)

VGA (640×480)

SVGA (800×600)

XGA (1024×768)

SXGA(1080×1024)

Continuous Presence

2, 3, 4, 9 and 16 pictures

Multiple VIP layouts: I + N, 2 + N, 3 + N and

more styles

Voice activation auto-trace

Customized CP background and frame color

Audio Features

Intelligent Audio Mixing Mute and Dumb control Voice Active Detection

Conference Functions

Virtual Conference
Conference Template
Conference Booking
Director Control, Chairman Control, Voice
Activation, Auto Polling
Endpoint join-in request, chairman request, speaker request, and chime-in request

Cascade Conference

Supporting visual MCC software

Caption

Conference caption scrolling
Configuration and management in WEB mode
Caption entry or file loading
SMS by Group sending or selective sending

Dual Video Stream

H.239 dual video stream Adjustable dual stream bandwidth allocation Right setting to originate dual stream

Data Conference *

T.120 standard conference
Rate range: 64Kbps ~ 2Mbps
Whiteboard, application sharing, file transfer and multi-party chatting
Supporting the access of a maximum of 32 parties

* This function module is optional

Embedded GK

Endpoint registration Address resolution Call control Bandwidth control Regional management

Network Adaptability

H.460 NAT/firewall transversal IPLR (Intelligent Packet Loss Recovery) QoS (DiffServ, IP Precedence) Auto recall after interruption Access bridging with multiple networks Multicast conference

Security Features

H.235 conference encryption
I 28-bit AES encryption
Conference password authentication, conference
lock protection
Management User authentication and authorization
Multicast user authentication

Management and Maintenance

Configuration in interface mode Remote configuration/upgrade System log

Electricity Characteristics

Power consumption: \leq 128W Power supply: AC (100V \sim 240V/50 \sim 60Hz)

Environmental Requirement

Ground resistance: \leq 5 Ω

Operating temperature: 0°C $\sim 60^{\circ}\text{C}$ Operating humidity: 10% $\sim 85\%$ (non-

condensing)

Atmospheric pressure: 86 ~ 106 kPa

Physical Features

19-inch 2U rack mounted* Height \times width \times depth: 88mm \times 443mm \times 338mm

Weight: ≤ 5.7 kg

* Only for firmware platform