ViewPoint 8660 Full-HD MCU

a smart choice for telecom operators and videoconferencing service providers



ViewPoint 8660 is the first carrier-class full high-definition multipoint control unit in the industry. It supports 1080p and 720p HD video, AAC-LD wideband audio, HD content sharing, integration with UC system and large capacity of audio accessing. With a full configuration, ViewPoint 8660 can simultaneously support up to 1,024 endpoints at the rate of 2 Mbps, which makes it an ideal fit for telecom operators, large enterprises, governments, and videoconferencing service providers.

Robust Carrier-Class Architecture Design

ViewPoint 8660 comes with a cutting-edge full-mesh hardware platform, high-speed backplane bus, and a double-layer subboard design. Its built-in real-time operating system effectively protects the videoconferencing system from virus and malicious attacks. The fully reliable design enables the hot backup of power supply, active/standby switchover of core modules (service modules, signaling modules, main control board, chips, and network ports), auto-backup of lines (IP/4E1/E1), and load sharing and hot swappable functions of the boards, thus ensuring the round-the-clock (7*24 hours) and stable operation of the videoconferencing service.

Full-HD Video, Audio, and Data

ViewPoint 8660 supports video formats including 1080p, 1080i and 720p, which brings you a true-to-life vision, The broadband audio AAC-LD delivers crystal clear audio and theatre-like experience. In addition, the HD dual-stream data content sharing delivers clear PPT or whatever in your PC or laptop.

Flexible Network Access and Networking Solutions, Customizable HD Videoconferencing

Line access: IP/4E1/E1/T1/ISDN(ITUT/ETSI, access by PRI) with an access rate of 64 kbps to 8 Mbps. It supports PSTN accessing by PRI and also supports hybrid networking.

Capacity expansion: Through flexible configuration of the boards, the capacity can be expanded smoothly.

Network capability: It is compliant with the ITU-T standards and protocols and supports up to 5-level multi channel cascaded networking. Transversal between public and private networks: ViewPoint 8660 can traverse between the public and the private networks by H.460 or adopting the patented SNP technology.

Extraordinary Network Adaptability and Security Mechanism

With super error concealment (SEC) technology, the video is clear and smooth even if the network packet loss is up to 5%. The intelligent rate control (IRC) technology detects network bandwidth in real time, and then adjusts the code stream bandwidth dynamically to guarantee the video quality.

The H.235 encryption mechanism fully guarantees the users' validity and a secure conference.

Rich and Easy-to-Use Services

SiteCall: You can hold multi-point conferences and control a conference through videoconferencing endpoint.

Conference control: All the operations can be performed at the endpoint side without involvement of the administrator at the MCU side.

Intelligent multicast: You can view live conference through PC software. CP browsing: The auto CP polling function enables you to view different video sites.

Site quality assurance: Administrators can preview sites in real time to monitor the conference quality, alarm history by Huawei Nlog system.



ViewPoint 8660 Specifications

Video Standards and Protocols

H.264, H.263, H.263+, H.261

ITU-T H.239, BFCP

People Video Resolution

Resolution: 1080p, 1080i, 720p, 4CIF, 4SIF, 2CIF, SIF, CIF, QSIF, QCIF

Video Frame Rate:

50fps(PAL), 60fps(NTSC), 25fps(PAL), 30fps(NTSC)

Content Video Resolution

Standard resolution from VGA to 1080p

Audio Standards and Protocols

AAC-LD, HWA-LD, G.722.1*, G.722.1C*, G.719, G.729A, G.729AB, G.728, G.722, G.711a/u

Tri-channe

VQM(Voice Quality Monitoring): echo, squeal, background noise, plosive, electricity hum

VQE(Voice Qualify Enhancement): ANS, ALC, ACLP, AGC, Line Echo cancellation

Other Supported Standards

H.221, H.225, H.231, H.235, H.241, H.242, H.243, H.245, H.281, H.283, H.460, T.140, TIP, FECC, RFC2833, DTMF

Network

Standards and protocols: ITU-T H.323/H.320, IETF SIP

Network standards: TCP/IP, FTP/FTPS, RTP, RTCP, HTTP/HTTPS, SNMP, TELNET, SSH, DNS/DDNS

Network Interfaces:

- GE, 10 M/100 M/1000 M, RJ45
- FE, 10 M/100 M, RJ45
- RS232, RJ45
- SFP, Gigabit optical fiber interface
- E1: 75/120 ohm, SMB/RJ45
- 4E1: 1-4E1 bundling, 75/120 ohm, SMB/RJ45

Line Types: IP, E1, 4E1 Support TIP, PSTN, VOIP

TV Wall

HD: 32*DVI/VGA/YPbPr

SD: 48*CVBS

Management Tools

System management: have management console and support SSH command, SFTP, embedded Web/GK

Statistics of packet loss

Nlog, visualized bi-directional network status statistics in real time

Loopback diagnosis

Physical dimensions

Dimension: 887mm (H) x 436mm(W) x 520mm(D), 20U

Weight: Less than 120 Kg

Power: $90 \sim 260 \text{V AC} \pm 10\%$, 50/60 Hz; 2000 W max power consumption

for whole device

DC input: -36 ~ -75V

Operating Environment

Operating temperature: $0^{\circ}\text{C} \sim 45^{\circ}\text{C}$ Relative humidity: $5\% \sim 90\%$ Rh

Air pressure: 70 ~ 106KPa Reliability MTBF: >100,000 hours

MTTR: 0.5 hours

System Capacity

IP: up to 1024*2 MbpsE1: up to 256*2 Mbps4E1: up to 64*8 Mbps

ISDN: up to 64 PRI or 256 3BRI(384k)

Audio Capacity

H323: up to 1000 ports SIP: up to 3000 ports PSTN: up to 1920 ports Up to 4920 audio ports

IP Qos

Adaptability intelligent rate control (IRC)

Super error concealment (SEC)

Auto adaptation enabling

Priority settings of QoS

SNP transversal between private and public networks

H.460/Static NAT transversal

Security

Conference password

H.235 signaling and media stream encryption

Advanced Encryption Standard (AES)

TLS/SRTP

Approval and Compliance

CE

RoHS

Conferencing Highlights

Continuous Presence (CP): 1080p HD CP and rate transcoding, 46 CP layouts, On-table display mode, voice activation, manual settings, auto polling function

Support for Huawei Telepresence HD multipoint conferencing

Multi-channel Cascade Technology in One conference (MCTO): The conference sites can be displayed by the TV wall or CP on the MCU in upper level, then the conference sites in lower lever can be displayed by upper level

Stream Broadcasting: Multicast live broadcasting; Conference site control

Holding conference: By management console, by SiteCall, by scheduling a conference from web or console, support LDAP

Attending conference: Through MCU and DTMF function, through videoconferencing endpoint, IVR alert tones

Call mode: Call through IP address; Call through endpoint number, URI dialing

Support Integration with Huawei eSpace, Microsoft Lync2010TM/ OCS2007R2, IBM Sametime, Skype and TIP Telepresence

Network recording: up to 1080P, tri-screen Telepresence conference recording, recording and streaming