

ViewPoint 8650 Full-HD MCU

a smart choice for medium to large-sized videoconferencing network



ViewPoint 8650 is the first of its type in the industry that fully supports 1080p and 720p HD video, AAC-LD broadband audio and HD content sharing, integration with UC system and large capacity of audio accessing. With a full configuration, ViewPoint 8650 can simultaneously support up to 256 videoconferencing endpoints at the rate of 2 Mbps, making it a good choice for medium to large sized videoconferencing network.

Robust Architecture Design

ViewPoint 8650 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 complete backup mechanism enables the backup of power supply, service modules, chips, network ports, and IP/4E1/E1 lines, thus ensuring the round-the-clock (7*24 hours) and stable operation of the videoconferencing service.

Crystal Clear Videoconferencing Experience

By supporting videoconferencing devices of all the mainstream vendors, it protects your previous investment as well as deploys new video endpoints with the latest technologies. It supports video formats including 1080p, 1080i, and 720p etc, which brings you a true-to-life vision. The wideband 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.

Rich and Easy-to-Use Services

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

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 polling function of site videos enables you to view different sites.

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

Flexible Network Access and Networking Solutions, Customizable HD Video Conferences

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 8650 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 auto adjusts the code stream bandwidth dynamically to guarantee the conference effect. The H.235 encryption mechanism fully guarantees the users' validity and a secure conference.

ViewPoint 8650 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-channel

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

VQE(Voice Quality 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: 16*DVI/VGA/YPbPr

SD: 24*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: 220mm (H) x 436mm(W) x 445mm(D), 5U

Weight: Less than 120 Kg

Power: 90 ~ 260V AC \pm 10%, 50/60 Hz; 750 W max power consumption for whole device

DC input: -36 ~ -75V

Operating Environment

Operating temperature: 0°C ~ 45°C

Relative humidity: 5% ~ 90% Rh

Air pressure: 70 ~ 106KPa

Reliability MTBF: >100,000 hours

MTTR: 0.5 hours

System Capacity

IP: up to 256*2 Mbps

E1: up to 128*2 Mbps

4E1: up to 32*8 Mbps

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

Audio Capacity

H323: up to 1000 ports

SIP: up to 1000 ports

PSTN: up to 1500 ports

Up to 1500 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

Embedded Conference Management Function

GK (SwitchCenter): Responsible for registration of conference endpoint, MCU, Gateway, and dealing with signaling, etc.

Web: Maintenance management, conference management, equipment configuration

Conferencing Highlights

Continuous Presence (CP): 1080p HD CP and rate adaptation, 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 layer, 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

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

Call mode: Call through IP address; Call through endpoint number, URI dialing
Support Integration with Huawei eSpace, Microsoft Lync2010™/OCS2007R2, IBM Sametime, Skype and TIP Telepresence

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

*: G.722.1/G.722.1C, licensed from Polycom®