ViewPoint 8650C Full-HD MCU

a smart choice for small- and medium-sized videoconferencing network



ViewPoint 8650C is the first of its type in the industry that supports high-definition and UC integration. The continuous presence, AAC-LD, ease of use, together with its embedded Web/GK make it a good choice for small- and medium-sized videoconferencing network to bring outstanding videoconferencing services.

Robust Architecture Design

ViewPoint 8650C comes with a cutting-edge full-mesh hardware platform. Its built-in strong capability of media processing and real-time operating system effectively protect the videoconferencing system from virus and malicious attacks to guarantee 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.

Abundant Video Encoding/Decoding resources

Rate and protocol adaption: Make full use of the customers' existing devices and establish service networks of different level.

Continuous presence: Support auto polling function, voice activation and on-table display mode to provide round-table conference experience.

Flexible Network Access and Networking Solutions, Customizable HD Video Conferences

Line access: IP, with an access rate of 64 Kbps to 8 Mbps.

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



ViewPoint 8650C 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

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, FECC, RFC2833, DTMF

Network

Standards and protocols: ITU-T H.323, 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

Line Types: IP

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: 43mm (H) x 436mm(W) x 531mm(D), 1U

Weight: Less than 15 Kg

Power: 90 \sim 260V AC $\pm 10\%,\,50/60$ Hz; 250W max power consumption for

whole device

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

IP QoS

Adaptability intelligent rate control (IRC)

Super error concealment (SEC)

Auto adaptation enabling

Priority settings of QoS

SNP traversal between private and public networks

H.460/Static NAT traversal

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

Multi-channel Cascade Technology in One conference (MCTO): The conference sites can be displayed by 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

 $\label{thm:bound} \mbox{Holding conference: By management console, by SiteCall, by scheduling}$

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

Support Integration with Huawei eSpace, Microsoft Lync2010 $^{\text{TM}}$ /OCS2007R2, IBM Sametime and Skype

Network recording: Recording and streaming at up to 1080p

ViewPoint 8650C series of products specification

Model	Capacity	Continuous presence	Transcoding capacity	Voice port	
Viewpoint 8650C-12	12-port 2M	4-pane (CIF)	2-port CIF	12-port	
ViewPoint 8650C-24	24-port 2M	4-pane (CIF)	2-port CIF	24-port	
ViewPoint 8650C-12XD	12-port 8M	12-pane (1080P)	4-port 1080P	12-port	
ViewPoint 8650C-24XD	24-port 8M	24-pane (1080P)	4-port 1080P	24-port	