



Huawei VP8660 Full-HD MCU

— a smart choice for telecom operators and videoconferencing service providers

Huawei VP8660 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 and SXGA (1280x1024) content sharing. With a full configuration, Huawei VP8660 can simultaneously support up to 1,024 endpoints at the rate of 2 Mbps, which makes it an ideal fit to telecom operators, large enterprises, governments, and videoconferencing service providers.



Robust Carrier-Class Architecture Design

Huawei VP8660 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 (7x24 hours) and stable operation of the videoconferencing service.

Full-HD Video, Audio, and Data

Huawei VP8660 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 SXGA (1280x1024) 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, with an access rate of 64 kbps to 8 Mbps. It 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: Huawei VP8660 can traverse between the public and the private networks by 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 Ease of 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 enable you to view different video sites.

Site surveillance: Administrators can monitor and preview any site in real time to monitor the conference quality, alarm history by Huawei Nlog system.

VP8660 Specifications

Physical dimensions

- Height: 20U, 19-inch standard chassis
- Width: 500 mm
- Weight: Less than 120 Kg
- Power: 90-260V AC \pm 10%, 50/60 Hz; 2000 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

Video Support

- H.264, H.263+, H.263, H.261
- Dual-Stream: ITU-T H.239
- 1080p, 1080i, 720P, 4CIF, 4SIF, 2CIF, SIF, CIF, QSIF, QCIF
- Video Frame Rate: 50fps(PAL), 60fps(NTSC), 25fps(PAL), 30fps(NTSC)
- SXGA(1280x1024), XGA(1024x768), SVGA(800x600), VGA(640x480)

Audio Support

- AAC-LD, HWA-LD, G.729A, G.729AB, G.728, G.722, G.722.1, G.711 G.711 a/u, G.723.1
- Triple-channel

TV Wall

- HD: 32xDVI/VGA/YPbPr
- SD: 48xCVBS

Management Tools

- System management: Through management console, through telnet command
- Conference site surveillance
- Statistics of packet loss
- Nlog, visualized bi-directional network status statistics in real time
- Loopback diagnosis

Network Support

- ITU-T H.323, H.320, IETF SIP
- Transmission Protocol: FTP, RTP, HTTP, SNMP
- Other Communication Compliant Protocols: H.225, H.231, H.233, H.234, H.235, H.241, H.242, H.243, H.245, H.281, H.283, H.281FECC, RFC2833 DTMF
- 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

System Capacity

- IP:1024x2Mbps
- E1:256x2Mbps
- 4E1:64x8Mbps

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 (TP3106, TP3016, TP3006, TP1002, etc) 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 level 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 terminal number, URI dialing.
- 3rd party interworking: Microsoft OCS/Lync interworking, TIP Telepresence interworking
- Huawei eSpace eConference interworking