## **HUAWEI VP9660 MCU**



HUAWEI VP9660 is a cutting-edge MCU with the highest capacity in the industry, flexible ports utilization and high scalability. It is the first MCU in the industry to support up to 1080p60 universal transcoding. Interoperability with various types of endpoints intelligently, VP9660 delivers users an ultimate videoconferencing experience.

## High performance and universal transcoding bring an ultimate experience

The first MCU in the industry supporting 1080p60 universal transcoding provides an ultimate videoconferencing experience for participants H.264 High Profile saves bandwidth by 50%

AAC-LD realizes CD-quality audio effect and three-channel brings sound localization

Intelligent transcoding for content sharing across different types of devices

## Standard-based, Open, Scalable

Supports multilevel cascading, multichannel cascading and conference recording

Standard-based and open: Supports H.323, H.320, SIP, TIP and convergence conference of Telepresence, HD/SD endpoints, mobile devices and audio endpoints

Integrated with Huawei eSpace Microsoft Lync2010<sup>TM</sup>/OCS2007R2, IBM Sametime UC and Skype

SOAP-based API for integration with third-party systems

Maximizes resource utilization and improves ROI by flexible resource allocation

## The Highest Capacity, Easy to Deploy

The highest capacity in the industry, scalable up to 672 ports with universal transcoding

Multiple modes for firewall traversal, such as H.460, static NAT, video firewall option and  $\mathsf{SNP}^\mathsf{TM}$ 

Multiple Methods for conference initiation, such as HUAWEI SiteCall<sup>™</sup>, Ad hoc, and web-based scheduling

Plenty of conference control functions, including Automatic Continuous Presence, Voice Activation, Chair control , DTMF Control, Audio/Video IVR, H.239 Content Sharing Token, and FECC

## Secure, Reliable and Powerful QoS

H.264 SVC and SEC 3.0 ensure smooth videoconferences even if the packet loss is up to 20%

Dynamic jitter buffer up to 1000 ms ensures conference quality  $IRC^{TM}$  provides the best conference experience with low network bandwidth

Ensures conference data security via H.235 (AES256), SRTP/TLS(AES256), HTTPS and SSH

MCU, Power, Control Board, Media Board, Network interface and Chipset hot spare

Sales item	Configuration	Description
VP9660-8	Frame + power + fans+ ECCB(control board) + media board + 8 1080p30 port licenses	Smooth scalable
Media board	Hardware resources: 24 ports at 1080p30 +24 audio ports	Used with port license
ISDN board	64 PRI or 256 3BRI(384k)	Each VP9660 supports one ISDN board only
ECCB	Main control backup board without media processing capability	
1 port License	1 1080p30 port license+ 1 audio port license	Need hardware resources, and possibly need to purchase Media Board
4 ports License	4 1080p30 ports license+ 4 audio ports license	Need hardware resources, and possibly need to purchase Media Board

## Note:

- VP9660-8, the basic model can be scalable to seven Media boards, two ECCB board and one ISDN board
- 1 port at 1080p60 = 2 ports at 1080p30 = 4 ports at 720p30 = 8 ports at 4CIF



# **HUAWEI VP9660** Specifications

#### Video Standards and Protocols

ITU-T H.264, H.264 HP, H.264 SVC, H.263, H.263+, H.263++, H.261

ITU-T H.239, BFCP

#### People Video Resolution

Resolution: QCIF, CIF, 4CIF, 720p, 1080p Video Frame Rate: 25fps, 30fps, 50fps, 60fps

#### Content Video Resolution

Standard resolution from VGA to 1080p60

#### **Audio Standards and Protocols**

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

Three-channel

#### Other Supported Standards

H.221, H.225, H.235, H.242, H.243, H.245, H.281, H.283, H.460, TIP, FECC, RFC2833, DTMF, SRTP, TLS, T.140, NTP

#### Network

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

 $Network\ standards:\ IPv6/IPv4,\ TCP/IP,\ FTP/FTPS,\ RTP,\ RTCP,\ HTTP/HTTPS,$ 

SNMP, TELNET, SSH, DNS/DDNS

Bandwidth for one port: 64Kbps~8Mbps

Network Interfaces:

- GE, 1000 Mb, RJ45
- FE, 100 Mb, RJ45
- RS232, RJ45
- SFP, Gigabit optical fiber interface

PRI E1 or T1: 75/120 ohm, SMB/RJ45

Line Types: IP, ISDN

### Management Tools

Support SSH

Remote upgrade

Resource statistic

Hardware diagnosis

Support CDR (Call Detail Record)

Data export and import

Support Conference configuration template

Status monitor

## **Physical dimensions**

Dimension: 886.2mm (H) x 436mm(W) x 420mm(D), 20U

Weight: Less than 100Kg

AC input: 100 ~ 240V AC 50/60Hz

DC input: -48 ~ -60V

Max power consumption: 3000W

### System Capacity

Up to 84 ports at 1080p60 with universal transcoding

Up to 168 ports at 1080p30 with universal transcoding

Up to 336 ports at 720p30 with universal transcoding

Up to 672 SD ports with universal transcoding

Additional audio ports: as many as 1080p30 ports

Up to 64 PRI/256 3BRI(384k) ISDN access

#### IP QoS

DiffServ (DSCP), IP Precedence, ARQ

SEC<sup>™</sup>3.0 (Super Error Concealment )

IRC<sup>™</sup> (Adaptability Intelligent Rate Control)

Auto adaptation enabling

Priority settings of QoS

SNP transversal between private and public networks

H.460/Static NAT transversal

#### Security

Conference password

H.235 (AES256) and SRTP/TLS(AES256) encryption

## **Approval and Compliance**

CE, WEEE, RoHS, REACH, FCC, UL, VCCI-A, GOST, C-TICK

#### Highlights

Universal transcoding for Telepresence

CP on each port

Auto Continuous Presence

Flexible ports

48 modes of Continuous Presence

Ad hoc and Audio/Video IVR

HUAWEI SiteCall<sup>™</sup>

Schedule conferences via Outlook

Email notification

URI dialing

Plenty of conference control functions

Chair control

Endpoint control via DTMF

Message overlay

Mute video

Support camera control

Support content lock

Support video source lock

Firewall traversal: H.460, static NAT, HUAWEI SNP, Video firewall option

Integrated with UC: Huawei eSpace, Microsoft Lync2010<sup>™</sup>/OCS2007R2, and IBM Sametime

Intelligent negotiation: Best utilization of endpoint's ability

Language: English, French, German, Spanish, Russian, Chinese, Japanese

## Operating Environment

Operating temperature: 0°C ~ 45°C

Relative humidity:  $5\% \sim 90\%$  (Non - Condensing)

Air pressure: 63 ~ 106KPa Reliability MTBF: >100,000 hours

MTTR: < 0.5 hour

<sup>\*:</sup> G.722.1/G.722.1C, licensed from Polycom<sup>6</sup>