

# HUAWEI VP9650 MCU



HUAWEI VP9650 is a cutting-edge MCU with high-capacity, High cost-effectiveness, 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, VP9650 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

## High capacity, Standard-based, Scalable

High capacity, scalable up to 288 ports with universal transcoding  
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™/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

## Easy to Deploy and Use

Embedded GK, Web and role-based management  
Multiple modes for firewall traversal, such as H.460, static NAT, video firewall option and SNP™  
Multiple Methods for conference initiation, such as HUAWEI SiteCall™, 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™ 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, Media board, Network interface and Chipset hot spare

Sales item	Configuration	Description
VP9650-8	Frame + power + fans+ ECCA(with control board and media board integrated) + 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
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:

- VP9650-8, the basic model has 2 more slots to be scalable
- 1 port at 1080p60 = 2 ports at 1080p30 = 4 ports at 720p30 = 8 ports at 4CIF

# HUAWEI VP9650 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.711, 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: 219.5mm (H) x 436mm(W) x 420mm(D), 5U

Weight: Less than 40Kg

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

DC input: -48 ~ -60V

Max power consumption: 1100W

## System Capacity

Up to 36 ports at 1080p60 with universal transcoding

Up to 72 ports at 1080p30 with universal transcoding

Up to 144 ports at 720p30 with universal transcoding

Up to 288 SD ports with universal transcoding

Additional audio ports: as many as 1080p30 ports

Up to 64 PRI/192 3BRI(384k) ISDN access

## IP QoS

DiffServ (DSCP), IP Precedence, ARQ

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

IRC<sup>TM</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

HTTPS ensures the safety for Web accessing

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

## Approval and Compliance

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

## Highlights

Embedded GK and Web

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>TM</sup>

Schedule conferences via Web and 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>TM</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% ~ 90% (Non - Condensing)

Air pressure: 63 ~ 106KPa

Reliability MTBF: >100,000 hours

MTTR: < 0.5 hour

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