HD Cloud Video Conference Multipoint Control Unit (MCU)

VY-M1160/VY-M1200



Functional description:

1. The device adopts an embedded operating system instead of the Windows system; it features carrier-grade and modular design, enabling 7*24-hour uninterrupted online operation.
2. It supports video coding and decoding protocols including H.264, H.264 MP, H.264 HP and H.265, as well as audio coding and decoding protocols such as G.711A, G.711U, G.722, iLBC, G.722.1, G.722.1C, OPUS_16K, OPUS_24K and OPUS_48K, with the maximum audio quality up to 48KHz.
3. It integrates multiple service modules in one, including registration, penetration, enterprise address book, video conference management, whiteboard collaboration, voice control, recording and storage, and live streaming.
4. It supports a bandwidth rate ranging from 64Kbps to 8Mbps, and video resolutions including 4KP30, 1080P60, 1080P30, 720P60, 720P30 and 4CIF.
5. Dual-stream capability: On the premise of ensuring the main video at 4K30fps, the auxiliary video can also support 4K30fps.
6. It supports the full trans-coding and full decoding technology, ensuring that each connected conference room can participate in the same conference with any different protocols, bandwidths, formats and frame rates. Packet loss of any participating terminal in the conference only affects the corresponding conference room without impacting the overall conference effect.
7. It supports protocol interconnection with mainstream H.323 video conference devices of ZTE, Huawei, Polycom, Cisco and other brands, realizing interconnection and mutual control.
8. A single device supports more than 20 independent conference rooms, concurrent virtual conferences of ≥100, and 200 concurrent users with 4KP30; it supports the virtual conference room function with a maximum of 100 virtual conference rooms and the SVC multi-stream mode, featuring multi-screen for each port, automatic Ontable multi-screen and automatic Layout multi-screen with a maximum of 64 sub-screens. It supports calling to convene a conference, URI call, IP address call and a unified access number.
9. It supports access of various video conference terminals, including but not limited to hardware terminals such as multi-interface terminals, split-type terminals, all-in-one terminals, all-in-one portable terminals, desktop terminals, surveillance cameras, UAVs and law enforcement recorders. Meanwhile, it supports direct access to conferences from laptops, PCs, web live streaming terminals, browsers (supporting WebRTC web-based conference access with audio and video interaction without installing apps or other relevant software), as well as IOS and Android mobile phones and tablets.
10. It supports holding multiple groups of 4K30fps high-definition multi-screen conferences simultaneously, with the maximum number of multi-screens for each group of conferences being ≥32, and no mutual interference between different groups of conferences.
11. It supports the AVC convergence mode, multi-level cascading, multi-screen fusion coding and broadcast mode, as well as various conference discussion modes such as branch conference rooms viewing the synthesized screen, designated conference room screen and designated multi-conference room screens.
12. It has a built-in central management server platform supporting the cluster management of up to 256 MCUs, with the ability to manage up to 256 MCU clusters on a single page. In provincial-level conferences, it can directly manage and view the audio and video of terminals under different MCUs, and realize multi-screen conferences of terminals under multiple MCUs on a single management page without cascading MCU synthesized multi-screens in small windows. The main conference room can manage the terminal devices of conference rooms under different MCUs on a single page, and perform operations such as one-click invitation of terminal devices from conference rooms in multiple districts and counties under different MCUs to join the conference, speaking right management, video broadcasting, arbitrary layout movement and window opening, muting, video closing, screen polling, and hanging up/inviting conference rooms. It supports multi-screen polling of multiple designated MCUs, making unified management more convenient and efficient.
13. It supports specifying the layout and the window positions of conference members for scheduled conferences; the window positions of different conference room layouts can be arbitrarily edited when scheduling a conference, and after one-click invitation of conference rooms to join the conference, the windows can be automatically arranged according to the preset positions without secondary manual management and control.
14. It supports the setting of conference member roles including host, speaker and audience, and can set different viewing contents such as multi-screen, host terminal, speaker terminal and other members. Once the conference is successfully scheduled, members are automatically invited to join, and all members can view the preset screen contents, making conference management and control simple and efficient.
15. It has the conference pre-monitoring capability, supporting real-time monitoring and preview of conferences.
16. It supports the MCU cascading function with the cascading of 256 MCU resource pools, and the cascading mode can support more than 10,000 users to join the conference. It supports MCUs forming resource pools and a distributed MCU architecture, realizing unified management of MCU resources, dynamic allocation of MCU resources and mutual backup.
17. It supports IPv4 and IPv6 protocols, has the ability to cross routers and firewalls to ensure system security, and supports the setting of parameters such as QOS, NAT and H.245 tunnel.
18. It supports dual-machine hot backup and can specify a standby server. When the primary server fails to work due to abnormal situations such as disconnection and power failure, the central management server will transfer the conferences and relevant data on the primary server to the standby server for processing, with the switching time less than 10 seconds.

Technical specifications:

Model	VY-M1160	VY-M1200
Capacity	Standard Capacity: 168 Ports	Standard Capacity: 200 Ports
Concurrent Conferences	20 Independent Conferences	
MCU Cascading Function	Cascading mode supports up to 10,000+ concurrent users	
Bandwidth Rate	64Kbps-8Mbps	
Network Communication Protocols	H.323, SIP	
Video Resolution	4KP30, 1080P60, 1080P30, 720P60, 720P30, 4CIF	
Audio Coding & Decoding Protocols	G.711A, G.711U, G.722, iLBC, G.722.1, G.722.1C, OPUS_16K, OPUS_24K, OPUS_48K	
Video Coding & Decoding Protocols	H.264, H.264 MP, H.264 HP, H.265	
Power Supply	100VAC～240VAC, 50Hz～60Hz, Dual Power Supply Redundancy	
Network Ports	5 RJ45 Standard Ports, 100M/1000M, Redundant Ports	
Temperature	0℃～35℃ (Operating State); -40℃～55℃ (Non-operating State)	
Relative Humidity	10%～80% (Operating State); 0%～95% (Non-operating State) (No Condensation)	
Ambient Noise	Less than 50dBA	
Device Dimensions	551mm*485mm*176mm	
Power Consumption	550W	
Weight	20Kg	