High-Definition Video Conference Terminal

VY-M2030/VY-M2040



Functional description:

1. Adopts a localized solution with a built-in hardware video processing unit, including audio and video codec unit, main control chip, memory chip, video input and output chip, etc.
2. The overall delay of video images after local collection, encoding, network transmission, decoding and display output is no more than 150ms.
3. Supports H.264, H.264 MP, H.264 HP and H.265 video codec protocols, as well as G.711, G.722, G.722.1, G.722.1C, OPUS and other audio codec protocols, with the maximum audio quality up to 48KHz.
4. Supports ITU-T H.323, SIP, SCM cloud and other communication protocols; compatible with mainstream video conference devices such as Huawei, ZTE, Polycom, Cisco and Ruisun.
5. Supports 4KP30 and H.265 codec algorithms, with the call bandwidth ranging from 64Kbps to 10Mbps; supports the transmission of video resolutions including 4K, 1080P, 720P, 4CIF and CIF; enables 4KP30 encoding at 1Mbps, and the simultaneous 4K transmission of main and auxiliary streams.
6. Supports a maximum 4KP60 ultra-high definition video signal input and a maximum 8KP60 ultra-high definition video signal output.
7. Supports single-screen dual-display, dual-screen dual-display and triple-screen triple-display functions to meet the needs of displaying main and auxiliary stream images on a single display at the same time. Dual screens display the main stream and auxiliary stream images respectively. Triple-screen triple-display shows the main stream + remote auxiliary stream + local auxiliary stream separately.
8. Supports multiple control methods, and the terminal can be operated via 2.4G remote control, web, conference control tablet, mouse and keyboard, etc.; the remote control supports one-key sleep and one-key wake-up functions.
9. The terminal can support the simultaneous connection of no less than 4 cameras or computer images at minimum. Without an additional matrix, the terminal can perform image stitching and layout switching on multiple camera or computer images, supporting single image, PIP (one large and one small), 4-split screen and other image layout modes.
10. Supports wired and wireless networks; the dual-network-port wired network can be configured with IP addresses at the same time to realize cross-network segment communication; the wireless network supports 2.4/5G Wi-Fi.
11. Supports auxiliary stream access via wired and wireless methods, and the simultaneous connection of no less than 16 wireless auxiliary streams, with free switching of wireless auxiliary stream images during meetings.
12. Supports local wireless screen projection, with the simultaneous connection of no less than 16 computer wireless screen projections and free switching of projected images.
13. Supports external touch control tablet VY-M2010, which is integrated with a capacitive touch screen of no less than 10.1 inches. The whole system supports no less than 10 conference touch control tablets, which can be used to complete operations on the terminal such as dialing, scheduling and creating virtual meetings, auxiliary stream sharing, auxiliary stream switching, image layout switching, chair control, image polling, banner display, rolling subtitles and electronic whiteboard. The electronic whiteboard function supports stroke color and thickness adjustment, stroke erasure, stroke clearing, whiteboard clearing and other operations.
14. Supports intelligent voice control, enabling functions such as joining/ending meetings, adjusting volume, sending/stopping dual-stream sharing through voice commands; the terminal supports USB mode, and can directly call the audio and video capabilities of the terminal by connecting to a PC and opening the cloud video conference software installed on the PC, meeting the usage requirements of various types of internet cloud conferences in large meeting rooms.

Technical specifications:

Model	VY-M2030	VY-M2040
Built-in MCU Channels	3	6
Communication Protocols		
Multimedia Protocols	ITU-T H.323, IETF SIP, SCM Cloud Protocol	

Video Codec Protocols	Supports H.264, H.264 MP, H.264 HP, H.265
Audio Codec Protocols	G.711, G.722, G.722.1, G.722.1C, OPUS
Dual-Stream Protocols	ITU-T H.239, BFCP
Video Features	
Access Rate	64Kbps–8Mbps, Adjustable Arbitrarily
Active Image Resolution	4K30, 1080P, 720P, 4CIF, CIF
Data Content	Supports single-screen dual-display, dual-screen dual-display and triple-screen triple-display functions. It allows displaying main and auxiliary stream images on a single monitor simultaneously; dual screens display main stream and auxiliary stream respectively; triple-screen triple-display shows main stream + remote auxiliary stream + local auxiliary stream separately.
Audio Features	Acoustic Echo Cancellation (AEC), Noise Suppression, Automatic Gain Control, Multi-channel Audio Mixing, Lip-sync
Network Adaptability	IP Network Packet Loss Recovery: No mosaic in images when packet loss is 5%; meetings can be held normally when packet loss is 8%; images are acceptable when packet loss is 20%. It adaptively adjusts video bit rate according to network bandwidth to ensure smooth meetings, supports NAT traversal, and QoS policies such as IP Precedence and DiffServ.
Video Input	5 HDMI high-definition video input interfaces, supporting up to 4KP60 ultra-high definition video signal input
Video Output	4 HDMI high-definition video output interfaces, supporting application scenarios such as single-screen dual-display, dual-screen dual-display and triple-screen triple-display; supporting up to 8KP60 ultra-high definition video signal output
Audio Input	7 audio input interfaces: 4*HDMI IN, 1*MIC IN, 1*LINE IN, Omnidirectional Microphone
Audio Output	4 audio output interfaces: 2*HDMI, 1*LINE OUT, Omnidirectional Microphone
Other Interfaces	3*USB2.0, 2*USB3.0, 1*RS232
Network Interfaces	4 x RJ45 Ports (100/1000M), supporting simultaneous operation of different IP addresses for internal and external networks; built-in 1 Wi-Fi, supporting 2.4/5GHz dual-band signals to fully cover low-speed and high-speed devices; a single unit can support 3 different IP network segments simultaneously
4G Mobile Signal	Supports 4G mobile signals; compatible with China Mobile, China Telecom, China Unicom and other operators
Operating Temperature	0℃～35℃ (Operating State); -40℃～55℃ (Non-operating State)
Relative Humidity	10%～80% (Operating State); 0%～95% (Non-operating State)
Power Supply	DC 12V 5A
Device Dimensions	433mm*285mm*65mm
Power Consumption	60W
Weight	10Kg