



Functional description:

1. Supports communication protocols such as ITU-T H.323, IETF SIP and SCM cloud protocol; compatible with mainstream video conference devices including Huawei, ZTE, Polycom, Cisco and Rongxun.
2. The main components of the terminal are independently developed and produced in China, including audio and video codec units, main control chips, video input and output chips, etc.
3. The overall delay of the video image after local collection, encoding, network transmission, decoding and display output is no more than 150ms.
4. Supports video codec technologies such as H.264, H.264HP and H.265, and audio codec technologies such as G.711, G.722 and OPUS, with the maximum sound quality up to 48KHz.
5. Adopts an all-in-one design with built-in modules such as a 4K camera, microphone and codec; supports 4KP30 collection, 1080P30 encoding, 4KP30 decoding, and the maximum high-definition output up to 4KP60.
6. Built-in camera with configurable power-on preset positions and 5x digital zoom adjustment; equipped with an 8-megapixel high-quality CMOS image sensor for 4K ultra-high-definition image collection.
7. Built-in pickup array microphone with omnidirectional sound pickup and an effective pickup distance of up to 6 meters; integrated with intelligent audio algorithms for echo cancellation and noise suppression.
8. Supports call bandwidth from 64Kbps to 4Mbps; supports video resolution transmission including 1080P, 720P, 4CIF and CIF; compatible with ultra-high-definition 4KP30 frame video processing capability.
9. The audio processing algorithm adopts a high-fidelity 48K audio sampling rate and lossless audio transmission technology; supports AEC, AGC and ANS processing to eliminate the impact of conference room environmental noise.
10. Transmits video conference images in the "main stream + auxiliary stream" dual-stream mode, with both main and auxiliary streams supporting up to 1080P30 transmission.
11. Supports conference reservation, participant selection and conference initiation on the terminal, which can quickly create a virtual conference on the MCU; only the selected participants can join the conference through the conference list, and unselected participants are not allowed to enter.
12. Supports quick conferences without MCU creation, enabling the terminal to convene a virtual conference room; supports point-to-point calling of any conference venue through the enterprise address book and seamless upgrade to multi-person interactive conferences; equipped with functions such as electronic whiteboard, file sharing, electronic voting, conference check-in, auxiliary stream annotation and interactive annotation.
13. Supports terminal control via infrared remote control, web, touch control, mouse and keyboard, etc.; the remote control has one-key sleep and wake-up functions.
14. Supports wireless access to auxiliary streams and simultaneous connection of multiple wireless auxiliary streams (no less than 16); allows free switching of wireless auxiliary stream images during the conference.
15. Supports local wireless screen projection and simultaneous connection of no less than 16 computer wireless screen projections; allows free switching of projected images.
16. Supports IPv4 and IPv6 protocols as well as NAT traversal; has the ability to cross routers and firewalls to ensure system security.
17. Supports external touch panel VY-M2010 with an integrated capacitive touch screen of no less than 10.1 inches; the entire system supports no less than 10 conference touch panels, which can be used to perform operations on the terminal such as dialing, reservation and creation of virtual conferences, auxiliary stream sharing, auxiliary stream switching, image layout switching, chair control, image polling, banner display and rolling subtitles, as well as electronic whiteboard functions including stroke color and thickness adjustment, stroke erasure, stroke clearing and whiteboard clearing.
18. Supports intelligent voice control; realizes functions such as joining/ending conferences, volume adjustment and sending/stopping dual-stream sharing through voice commands.
19. Supports receiving a unified background address book, which can be uniformly pushed to all terminals by the platform and updated automatically; the online and offline status of terminals in the address book can be viewed on the terminal address book interface.
20. Has the video preview polling function, which allows selection of polling windows, polling time intervals and participants in the polling.
21. Supports chair control mode; after applying for chair permissions, the user can control parameters such as the coding rate and resolution of dual streams in all remote venues, and perform pan, tilt, focus and zoom operations on the PTZ cameras of remote venues.
22. Has a repair mechanism for IP network packet loss; ensures no image mosaic when the packet loss rate reaches 5%, normal conference operation when the packet loss rate reaches 8%, acceptable image quality when the packet loss rate reaches 20%, and unaffected audio to guarantee normal conference progress when the packet loss rate reaches 70%.
23. Features super strong network adaptability; automatically adjusts the resolution according to the network condition to ensure smooth conference progress.

- 24. Supports the banner function; allows adding banners to conference images and setting the banner enable status, as well as the font size, font color, background color and transparency of the banners.
- 25. Supports the rolling message function; allows sending rolling messages and setting the rolling message enable status, as well as the font size, font color, background color, transparency and rolling times of the rolling messages.
- 26. Supports audio processing functions such as automatic noise suppression, automatic gain control, automatic echo cancellation and lip-sync.
- 27. Supports voice priority and QoS policy modes, as well as IP Precedence and Diffserv.

Technical specifications:

Model	VY-TM230
Communication Protocol	
Multimedia Protocol	ITU-T H.323, IETF SIP, SCM Cloud Protocol
Video Codec Protocol	H.264, H.264 MP, H.264 HP, H.265
Audio Codec Protocol	G.711, G.722, G.722.1, G.722.1C, OPUS
Dual-Stream Protocol	ITU-T H.239, BFCP
Built-in Camera	Built-in 8-megapixel 4K30 Camera
Video Features	
Access Rate	64Kbps–8Mbps, Arbitrarily Adjustable
Video Output	1*HDMI Output
Active Image Resolution	4K30, 1080P, 720P, 4CIF, CIF
Audio Features	
Audio Processing	Acoustic Echo Cancellation (AEC), Noise Suppression, Automatic Gain Control, Lip Sync
Audio Input	1*Built-in Array Microphone, 1*3.5mm Audio Input, USB Audio
Audio Output	1*3.5mm Audio Output, 1*HDMI, USB Audio
Network Communication	
Network Adaptability	IP Network Packet Loss Recovery; No image mosaic when packet loss rate is 5%; Normal conference operation when packet loss rate is 8%; Acceptable image quality when packet loss rate is 20%; Automatically adjusts video bitrate according to network bandwidth to ensure smooth conferences; Supports NAT Traversal, QoS policies such as IP Precedence and DiffServ.
Network Interface	1*Gigabit Ethernet Port
Other Interfaces	1*USB2.0, 1*USB3.0
Operating Temperature	0°C ~ 35°C (Operating State); -40°C ~ 55°C (Non-operating State)
Relative Humidity	10% ~ 80% (Operating State); 0% ~ 95% (Non-operating State)
Power Supply	DC 15V 2A
Device Dimensions	330mm*70mm*70mm
Power Consumption	24W
Weight	1.5kg