

Video Conferencing Endpoint (H.323/SIP)

Full HD Video Conferencing Endpoint C10X



C10X is a high-definition video conference terminal designed for government and enterprise meetings, group meetings, remote training and other scenarios. It supports standard SIP and H.323 protocols, is compatible with the industry's mainstream conferencing platforms, and is equipped with strong audio and video encoding and decoding processing capabilities, which can realize multiple inputs and outputs for audio and video, meet the needs of various types of meeting scenarios, and bring efficient and safe remote communication and collaboration experience.



Features

- Standard Protocol, Convergence and Interoperability**
 Standard SIP and H.323 protocols supported; compatible with the industry's mainstream standard terminals and networked devices.
- Low Bandwidth and High Definition**
 H.264 HP coding, standard supported; 50% less bandwidth than the previous-generation compression standard.
- Multiple Sound Input**
 Various audio input solutions such as USB microphone, analog microphone and linear input are supported to suit different conference scenarios and meet more audio requirements.
- Excellent Network Security**
 H.460 firewall traversal supported to guarantee the secure connection of public and private networks. Encryption algorithms such as H.235, AES-256, AES-128, SRTP and other protocols are supported for all-round guarantee for IP communication security.
- 1080P Full-HD**
 1080P60 ultra-fluid full-HD video; four (HDMI+DVI-D+3G-SDI+VGA) HD video inputs and four (3-HDMI+3G-SDI) HD video outputs supported.
- Embedded DSP Solution**
 Embedded DSP Solution/hardware solution offers high efficiency and low latency.
- Fully Open API**
 Fully open API supports the development of third-party applications and is easy for secondary development by customer to meet their customization requirements.

Product Specification

Standard & Protocol

Multimedia Framework Protocol	ITU-T H.323, IETF SIP
Video Codec Protocol	H.261, H.263, H.263+, H.263++ , H.264, H.264 High Profile
Audio Codec Protocol	G.711, G.722, G.722.1*, G.722.1C*, AAC-LD, G.726, SILK
Double Stream Protocol	ITU-T H.239, IETF BFCP
Other Communication Protocols	H.231, H.234, H.235, H.235+, H.241, H.245, H.281, H.350, H.460, T.140, DTMF
Network Transmission Protocols	TCP/IP, DHCP, SSH, HTTP, HTTPS with SSL, TLS, RTP, RTCP, RFC3261, RFC3264, RFC2790, RFC3984, RFC3407, RFC2833, RFC4585(RTP/AVP), SNMP, ARP, RTMP

Video Features

Active Image Resolution	<ul style="list-style-type: none"> 1080p, min. bandwidth 1024Kbps 720p, min. bandwidth 512Kbps width/height/ACIF: min. bandwidth 256 Kbps width/height/SIF/CF: min. bandwidth 128 Kbps
Data Content Resolution	<ul style="list-style-type: none"> Input: VGA (640×480), SVGA (800×600), XGA(1024×768), WXGA(1280×768), WXGA (1280×800), 1280×960, SXGA(1280×1024), 1360×768, 1366×768, 1440×900, 1600×900, 720p(1280×720), 1080i(1920×1080), 1080p(1920×1080) codec: 800×600, 1024×768, 1280×1024, 1280×720, 1920×1080, 1920×1080, 1024×768, 1280×1024, 1280×720, 1920×1080
Active Double Stream	1080P60+1080P30
Other Image Feature	PIP, POP and other display modes supported; three screens and three displays

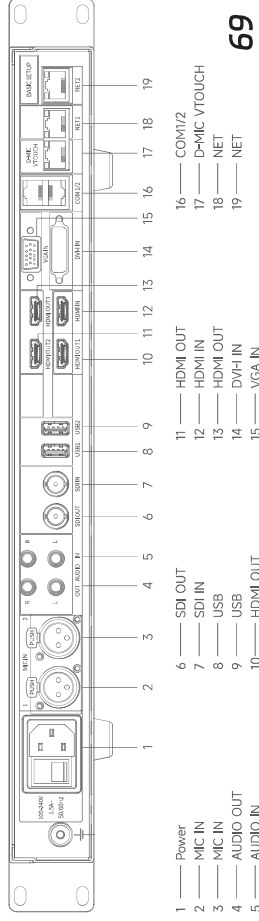
Audio Features

Audio Feature	<ul style="list-style-type: none"> Automatic echo cancellation (AEC) Automatic gain control (AGC) Automatic noise suppression (ANS) Lip-sync supported
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Reliability & security

Network Adaptability	Video forward error correction (FEC), automatic repeat request (ARQ) etc
Security Management	<ul style="list-style-type: none"> H.235 signaling and media stream encryption(AES-128, AES-256) TLS and SRTP Administrator password: SSH/HTTPS
NAT/Firewall Traversal	H.460 static NAT

Interface Diagram



Bandwidth

IP	64Kbps ~ 8Mbps
I/O	2 × RC Alinear input, 2 × Cannon plug microphone input, 1 × 3.5mm, 1 × DMIC, 1 × DVI-H, 1 × HDMI
Audio Input Interface	2 × RC Alinear output, 2 × HDMI Audio output;
Audio Output Interface	1 × HDMI, 1 × VGA
Video Input Interface	1 × DVI-H, 1 × 3G-SDI
Video Output Interface	3 × HDMI, 1 × 3G-SDI
USB Interface	2 × USB2.0 (USB flash disk supported)
Network Interface	2 × RJ45, 10/100/1000 Base-T; for IP networking
Camera Control Interface	2 × RS232

Conferencing Features

Language	Simplified Chinese, Traditional Chinese, English, Polish, etc.
Contacts and Call History	<ul style="list-style-type: none"> 1000 local contacts and call records
Featured Functions	<ul style="list-style-type: none"> Auxiliary streaming accompaniment; Support for "Same View"; Time switch; Caller ID; Asymmetric bandwidth; Built-in VPN; Three-part display; Network address book; Support chairman conference control; Built in MCU; USB microphone connection; Infrared Transmission; Conference Lock PC console; TR069; RTMP Push and Pull Live Streaming; Automatic standby and wake-up for incoming calls; Automatic static NAT address acquisition; Picture in Picture (1/16 screen size), Picture based on picture; Support third-party integration and development API interfaces; USB upgrade, local upgrade and network upgrade

Generic Spec

Dimension	<ul style="list-style-type: none"> Dimension: 375mm (W) × 428mm (D) × 89mm (H) Net weight: 3.5 Kg
Power Supply	<ul style="list-style-type: none"> Operating voltage: AC 100V ~ 240V Operating frequency: 50Hz/60Hz Max. power consumption: < 50W
Environmental Requirements	<ul style="list-style-type: none"> Temperature: 0 °C ~ 40 °C (working condition), -40° C ~ 70° C (Non working state) Humidity: 10% ~ 80% (operating), 0% ~ 95% (non-operating) Max. altitude: < 4600A SPL Max. illumination: 5lux Recommended illuminance: > 300lux
Certification and Standards	China Telecom Network Access, CCC, CE, RoHS, FCC