HUAWEI CloudLink Collaborative Telepresence Endpoints

Eliminate Time and Space Limitations | Connect Teams | Ignite Creativity

CloudLink Box 300/600

Ultra-HD Video Conferencing Endpoint

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The CloudLink Box, Huawei's next-generation ultra-HD video conferencing endpoint, provides a powerful audio and video media processing engine, with an extensive range of audio and video ports. It can be used with a variety of cameras and display devices in meeting rooms of all sizes.

CloudLink Box 300 / 600

Ultimate Performance, Unlimited Scalability

4K 30 fps video, H.265 encoding and decoding

An extensive range of input and output ports for fast integration in meeting rooms

Easy operations with a wireless tablet that comes standard

Highlights

Professional-Grade Ultra-HD

· 4K ultra-HD video with breathtaking color, delivering an immersive meeting experience
· 4K content sharing, with every detail presented perfectly
· H.265 codec and VME (Huawei's proprietary technology), enabling strong network adaptability, 30% video packet loss concealment (PLC), and 4K 30 fps at 2 Mbit/s

· Standard audio and video ports, which can be connected to the microphone array, loudspeaker, projector, and large LCD/LED screens
· One port named HT-RX, which functions as the network port, power port, and video port (allowing long-distance video input)

Suitable for a Variety of Use Cases

Intelligent Content Sharing

- Wireless sharing from your laptop or mobile phone, adding to the clean, no-wire aesthetic
- One-touch sharing and fast switching between different sharing sources such as laptop and mobile phone
- Sharing of audio, video, and images

Free Viewing of Participants

- Simultaneous encoding and decoding of multiple streams in different formats, allowing users to view other participants flexibly
- Network access on a wide range of terminals, without any need for encoding and decoding resources on MCUs

Easy Operations with a Tablet

- 10-inch tablet, which is stylish and easy to use
- User-friendly GUI
- PoE power supply; reserved Kensington lock slot

Intelligent Meeting Experience

- Facial recognition sign-in and on-screen name tag

Application Scenarios

Box + Camera 500

Ultra-HD Video & Hi-fi Audio, Intelligent Views

Business Meeting

Box + 4K Camera + 4K Large Screen

Every Detail Presented Perfectly

1000+ Participant Meeting

Box + VPT300 Camera

Facial Tracking

Administrative conference

Features

Functions and Features

Ultra-HD video	· Huawei's proprietary VME technology, combined with H.265-based encoding and decoding for video and content, delivers a 4K ultra-HD video experience. · Intelligent face detection and backend video processing enhance light adaptability, reduce bandwidth consumption, and improve image definition.
Hi-fi audio	· Acoustic Echo Cancellation (AEC), Automatic Noise Suppression (ANS), Automatic Gain Control (AGC), VoiceClear, AudioEnhancer, and lip synchronization Opus, · Forward Error Correction (FEC), Backward Error Correction (BEC), Packet Loss Concealment (PLC), Net Automatic Transfer-Enhancement (netATE), and Audio Jitter Buffer (AJB) · Support for cascading of two microphones
Intelligent content sharing	· 4K ultra-HD content sharing · Wired and wireless presentation · IdeaShare is the wireless sharing client developed for CloudLink series endpoints and runs on a laptop or mobile device. Using the IdeaShare mobile client, you can share screen, adjust the volume, turn on or off the microphone, control the camera. When a participant is sharing screen using IdeaShare, another participant is still allowed to start sharing, but the existing screen sharing session will be released. At most twenty IdeaShare clients can connect to the same endpoint
Multistream meeting	· Multiple terminals can connect to one meeting. With the multistream video capabilities, you can choose to view video of other participants as needed. Fewer resources are consumed and latency is also reduced.
Multiple layouts	· Video and content can be displayed on one screen, but in different panes. In a data conference, you can view the composite of the participant video, whiteboard, and shared content. · Three HDMI outputs are available, supporting three screens. (Box 600)
Network adaptability	· The Box utilizes Super Error Concealment (SEC), Hybrid Automatic Repeat Request (HARQ), and automatic deceleration to deliver clear and smooth video even when the packet loss rate reaches 30%.
Homegrown core technologies	· Secure and reliable, with self-developed software and hardware, including CPU · Core audio and video technologies: audio and video capability enhancement, H.264/H.265/super-resolution technology, QoS network optimization technology, anti-feedback technology, active noise suppression algorithm, and virtual background replacement

Specifications

Components

Ultra-HD codec, ultra-HD camera (optional), microphone array (optional), CloudLink Touch, cables, and power adapter

Communications Protocols

Multimedia frame protocols	ITU-T H.323 and IETF SIP
Video codec protocols	H.265, H.264 HP, H.264 BP, H.264 SVC, H.263, and H.263+
Audio codec protocols	G.711A, G.711U, G.722, G.722.1, G.722.1C, G.729A, AAC-LD, and Opus
Dual-stream protocols	ITU-T H.239, Binary Floor Control Protocol (BFCP), and data
Other communications protocols	H.225, H.235, H.241, H.245, H.281, H.350, H.460, RFC2833, LDAP, and LDAPS
Network transmission protocols	TCP/IP, RTP, RTCP, DHCP, DNS, SMTP, SNMP, SNTP, Telnet, SSH, HTTP, HTTPS, and TR-069

Video Features

Content resolution	Inputs: HDMI: 640 × 480 60/72/75/85fps, 800 × 600 56/60/72/75/85fps, 1024 × 768 60/70/75/85fps, 1152x864 60/75/85fps, 1280 × 600 60fps, 1280 × 720 60/75/85fps, 1280 × 768 60/75/85fps, 1280 × 800 60/75/85fps, 1280 × 960 60/75/85fps, 1280 × 1024 60/75/85fps, 1360 × 768 60fps, 1366 × 768 60fps, 1440 × 900 60fps, 1400 × 1050 60fps, 1600 × 900 60fps, 1600 × 1200 60fps, 1680 × 1050 60fps, 1920 × 1080 24/25/30/50/60fps, 1920 × 1200 60fps, 3840 × 2160 25/30/50/60fps Encoding/Decoding resolution: CIF(352*288) 640*480 4CIF(704*576) 800*600 1024*768 720P(1280*720) 1280*1024 448P(768*448) 1080P(1920*1080) 1600*1200 1920*1200 1152*864 1280*600 1280*768 1280*800 1280*960 1360*768 1366*768 1440*900 1400*1050 1600*900 1680*1050 2048*1152 2048*1236 2048*1536 2048*1556 2560*1440 2560*1600 2560*2048 2880*1620 2880*1800 3200*1800 4K(3840*2160) Outputs: 1920 x 1080, 3840 x 2160
Other video features	Various display modes, such as Picture in Picture (PiP) and Picture out Picture (PoP), Video Motion Enhancement (VME), VideoIntensifier, and ViewProcessing
Audio features	Acoustic Echo Cancellation (AEC), Automatic Noise Suppression (ANS), Automatic Gain Control (AGC), VoiceClear, AudioEnhancer, and lip synchronization

Meeting Features

Languages	Simplified Chinese, English, French, German, Japanese, Spanish, Portuguese (Brazil), Traditional Chinese, and Russian
Prominent features	· USB-based automatic configuration (plug-and-play) · Wi-Fi access * · SiteCall · Wireless data sharing · IdeaShare · LDAP/network address book · Web-based meeting control · Video monitoring on the web interface · HD image snapshot (two display modes: 16:9 and 4:3) · Picture in Picture (PiP) (small window: 1/16 of the main window in size with adjustable position) · Open APIs for third-party integration and development

Security and Stability

Network adaptability	IPv4/IPv6, IP Precedence, DiffServ, and URI dialing Super Error Concealment (SEC), Automatic Repeat Request (ARQ), Forward Error Correction (FEC), Intelligent Rate Control (IRC), and Backward Error Correction (BEC)
Network security	H.235/TLS for signaling encryption and SRTP for media encryption Meeting access password, meeting control password, administrator password Dual-stream encryption
Firewall traversal	H.460-based traversal between private and public networks, static network address translation (NAT)
Environmental requirements	Temperature: 0°C to 40°C (32°F to 104°F) (in use) -40°C to +70°C (-40°F to 158°F) (idle) Relative humidity: 5% to 95% (in use) 5% to 95% (idle) Ambient noise: < 46 dBA SPL
Regulatory compliance	CCC, CE (RoHS, REACH, and WEEE), Network Access License of MIIT, and Radio Type Approval Certification

*: These are only for the Box 300 or 600 with a Wi-Fi module.

Specifications

Characteristic	CloudLink Box300	CloudLink Box600
Positioning	· Business	· Professional
Scenes	· Small and medium-sized meeting rooms	· Medium and large-sized meeting rooms

Video Resolution	· H.264 (min. bandwidth required)
	  1080p 60 fps at 1 Mbit/s
	  1080p 30 fps at 512 kbit/s
	  720p 60 fps at 768 kbit/s
	  720p 30 fps at 384 kbit/s
	· H.265 (min. bandwidth required)
	  4K 30 fps at 2 Mbit/s
	  1080p 60 fps at 768 kbit/s
	  1080p 30 fps at 384 kbit/s
	  720p 60 fps at 512 kbit/s
	  720p 30 fps at 256 kbit/s
		· H.264 (min. bandwidth required)
		  1080p 60 fps at 1 Mbit/s
		  1080p 30 fps at 512 kbit/s
		  720p 60 fps at 768 kbit/s
		  720p 30 fps at 384 kbit/s
		· H.265 (min. bandwidth required)
		  4K 30 fps at 2 Mbit/s
		  1080p 60 fps at 768 kbit/s
		  1080p 30 fps at 384 kbit/s
		  720p 60 fps at 512 kbit/s
		  720p 30 fps at 256 kbit/s

Dual-stream capability	· 1080p 30 fps + 1080p 30 fps (4K 8 fps) · 1080p 60 fps + 1080p 60 fps (4K 15 fps) · 4K 30 fps + 1080p 60 fps · Data conference: 1080p 30 fps/4K 8 fps	· 1080p 30 fps + 1080p 30 fps (4K 8 fps) · 1080p 60 fps + 1080p 60 fps (4K 15 fps) · 4K 30 fps + 1080p 60 fps · Data conference: 1080p 30 fps/4K 8 fps

Video input ports	· 1 x HT-RX
	  2 x HDMI
		· 1 x HT-RX
		  3 x HDMI

Video output ports	· 2×HDMI	· 3×HDMI

Audio input ports	· 1 x HD-AI
	  1 x XLR connector
	  2 x HDMI (audio input)
	  2 x RCA
		· 1 x HD-AI
		  1 x XLR connector
		  3 x HDMI (audio input)
		  2 x RCA

Audio output ports	· 4 x RCA
	  2 x HDMI (audio output)
		· 4 x RCA
		  3 x HDMI (audio output)

Other ports	· 2 x USB 2.0 Type-A
	  2 x 10/100/1000 Mbit/s LAN
	  1 x PoE network port (Touch)
	  2 x RJ45 serial port
	  1 x Wi-Fi (built-in)
		· 2 x USB 2.0 Type-A
		  2 x 10/100/1000 Mbit/s LAN
		  1 x PoE network port (Touch)
		  2 x RJ45 serial port
		  1 x Wi-Fi (built-in) *

Microphone cascading	· 2	· 2
Bandwidth	· IP: 64 kbit/s to 8 Mbit/s	· IP: 64 kbit/s to 8 Mbit/s

Dimensions	· Endpoint:
	  58 mm x 442 mm x 285 mm
	  (2.28 in. x 17.40 in. x 11.22 in.)
	  Package:
	  265 mm x 580 mm x 380 mm
	  (10.43 in. x 22.83 in. x 14.96 in.)
	  Net weight: 4.2 kg (9.3 lb)
	  Gross weight: 9 kg (19.8 lb)
		· Endpoint:
		  58 mm x 442 mm x 285 mm
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		  Package:
		  265 mm x 580 mm x 380 mm
		  (10.43 in. x 22.83 in. x 14.96 in.)
		  Net weight: 4.2 kg (9.3 lb)
		  Gross weight: 9 kg (19.8 lb)

Electrical features	· Working voltage: 100 V to 240 V AC
	  Working frequency: 50 Hz to 60 Hz
	  Max. power consumption: 51.6 W
	  Embedded AC/DC power module
		· Working voltage: 100 V to 240 V AC
		  Working frequency: 50 Hz to 60 Hz
		  Max. power consumption: 51.6 W
		  Embedded AC/DC power module

*: These are only for the Box 300 or 600 with a Wi-Fi module.

Ordering Information

Category	Description	Remarks
HUAWEI Box 300,Videoconferencing Endpoint(1080P30)	Box 300-1080P30	
HUAWEI Box 300,Videoconferencing Endpoint(1080P60)	Box 300-1080P60	
HUAWEI Box 600,Videoconferencing Endpoint(1080P30) Optional for No Wi-Fi model	Box 600–1080P30	
HUAWEI Box 600,Videoconferencing Endpoint(1080P60)	Box 600–1080P60	
HUAWEI Box 600,Videoconferencing Endpoint(4K30)	Box 600–4K*2K	
1080P30-to-1080P60 Codec Software License	-	
1080P60-to-4K30 Codec Software License	-	
1080P30-to-4K30 Codec Software License	-	

Learn More>>>

Huawei Enterprise
Collaboration

CloudLink Collaborative
Telepresence Products

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