HUAWEI TE60

Flagship HD Video Conferencing Endpoint





Huawei TE60 is the top-of-the-line HD video conferencing endpoint, offering the largest array of audio/video interfaces and Wi-Fi connection with fully featured multi-view image sending. With robust performance, dual 1080p 60fps video, and AAC-LD audio, it brings lifelike experience to large integrated video conferences.

Innovative technologies provide HD experience with low-bandwidth

TE60 supports resolutions up to dual-stream 1080p 60fps to provide total HD experiences;

With the combination of VME2.0 and H.264 HP, bandwidth consumption is reduced by 50%;

Intelligent face detection, frame rate doubling, and video enhancement technologies provide outstanding video communication experiences;

TE60 supports AAC-LD, Acoustic Echo Cancellation (AEC) and Acoustic Noise Suppression (ANS) to provide Hi-Fi audio.

Feature-rich functionalities, intelligent and easy-to-use to satisfy customers' requirements

Voice Dialing: TE60 recognizes multiple languages. You can call or join a conference simply by saying the conference or site name.

Multi-view: Images from multi-cameras are transmitted in CP to the far-end via one stream which saves bandwidth and enables far-end sites to view live images from different angles.

Live content: More than one site can share full HD content simultaneously, and any site can view any content as needed.

Air content sharing: No VGA cable required, users easily share data as presentations or content over wireless or IP network.

USB auto configuration: Data configuration is completed via U-disk, providing plug-and-play which is secure, convenient, and effortless. VGA bypass: Local conference and video conference share one VGA,

keeping local data sharing active without the need to plug and unplug VGA cables even after the video conferencing endpoint powers off.

User-Friendly Interface and Remote-Control Design

Innovative 3D GUI, convenient to use and maintain.

Wizard for first-time installation.

LCD display for real-time local site information.

Outstanding Network Adaptability and Security Mechanism

Patented Super Error Concealment (SEC) ensures high-quality video experiences even with packet loss at 20%.

Supports H.264 SVC, adaptable to different bandwidths, device capabilities, and network requirements.

Standard H.460 and proprietary SNP technology guarantee secure firewall traversal.

H.235 media stream and signaling encryption for SRTP, TLS, and HTTPS.

Extensive System Integration

Inter-operable with standard endpoints and infrastructures. Integration with Microsoft Lync2010 $^{\text{TM}}$ and $\,$ OCS2007R2.

Seamless integration with IMS.

Plentiful third-party APIs for system integration and customization.



HUAWEI TE60 Specifications

Unit delivered complete with

HD Codec, Remote control, Cables, and power supply;

Optional: HD Camera and Omni-array Microphone

Standards and Protocols: ITU-T H.323, IETF SIP

Video Standards & Protocols: H.261, H.263, H.263+, H.264 BP, H.264 HP, H.264 SVC

Audio Standards & Protocols: G.711, G.722, G.722.1*, G.722.1C*, G.728, G.719, G.729A, AAC-LD,

Dual Stream: ITLI-T H 239 RECP

Other Standards: H.221, H.225, H.230, H.231, H.233, H.234, H.235, H.241, H.242, H.243, H.245, H.281, H.283, H.350, H.460, T.140

Network Standards & Protocols: TCP/IP, FTP, FTPS, DHCP, SNMP, Telnet, SSH, HTTP, HTTPS, PPPoE, RTP, RTCP, SNTP

People Video Resolution

- 1080p @ 60 fps from 1Mbps (Optional) 1080p @ 30 fps from 512 Kbps 1080i @ 60 fps from 512 Kbps

- 720p @ 50/60 fps from 512 Kbps 720p @ 25/30 fps from 384 Kbps 4SIF/4CIF from 128 Kbps SIF/CIF/QSIF/QCIF/SQSIF/SQCIF from 64 Kbps

- Intent Video Resolution: Input: VGA (640 x 480) @ 60/72/75/85 fps, SVGA (800 x 600) 56/60/72/75/85 @ fps, XGA (1024 x 768) @ 60/70/75/85 fps, 1152 x 864 @ 60/75/85 fps, 1280 x 600 @ 60 fps, WXGA (1280 x 768) @ 60/75/85 fps, WXGA (1280 x 800) @ 60/75/85 fps, 1280 x 960 @ 60/75/85 fps, SXGA (1280 x 1024) @ 60/75/85 fps, 1360 x 768 @ 60 fps, 1440 x 900 @ 60 fps, XGA+ (1400 x 1050) @ 60 fps, 720p @ 60/75/85 fps, 1366 x 768 @ 60 fps, 1440 x 900 @ 60 fps, XGA+ (1400 x 1050) @ 60 fps, 720p @ 60/75/85 fps, 1080p @ 60 fps, 1600 x 900 @ 60 fps, 1600 x 1200 @ 60 fps, 1680 x 1050 @
- 60 fps, 1920 x 1200 @ 60 fps Coding/Decoding resolution: 800 x 600, 1024 x 768, 1280 x 1024, 1280 x 720, 1920 x 1080, 1600 x 1200, 1920 x 1200
- Output: 800 x 600, 1024 x 768, 1280 x 1024, 1280 x 720, 1920 x 1080, 1600 x 1200, 1920 x 1200

Dual Stream: Dual 1080p @ 60 fps (Optional); Dual 1080p @ 30 fps

Other Video Features

- Intelligent Face Detection
 Picture in Picture,
- Picture outside Picture Video Motion Enhancement (VME)
- Video Intensifier
- View Processing

Audio Specifications and Features

- Audio Features

 Dual-channel AAC-LD Stereo

 HWA-LD Stereo: Huawei Audio Broadband Low Delay Stereo

 Acoustic Echo Cancellation (AEC)

 Acoustic Noise Suppression (ANS) 12 dB

- Automatic Gain Control (AGC) ±6 dB Voice Clear, Audio Enhancer Lip synchronization

- Dual-stack IPv6 and IPv4
- IP Precedence, Diffserv
- Uniform resource identifier (URI) dialing
- Super Error Concealment (SEC), Intelligent Rate Control (IRC)
 Automatic Repeat reQuest (ARQ), Forward Error Correction (FEC), PLC

- H.235 signaling and media stream encryption
 AES media stream encryption, dual-stream encryption
- TLS and SRTP for SIP signaling and media stream encryption Conference access password, conference control password
- Administrator password, SSH/HTTPS

Firewall Traversal: H.460.18, H.460.19 firewall traversal, Static NAT, SNP

Bandwidth

IP: 64 Kbps to 8 Mbps

4E1: 64 Kbps to 8 Mbps

Audio Inputs: $2 \times XLR$, $2 \times RCA$, $1 \times HDMI$, $1 \times Display Port$, $1 \times HD-AI$ (Mic Array/Audio external)

Audio Outputs: $4 \times RCA$, $2 \times HDMI$, $2 \times DVI-I / HDMI$ (DVI converted to HDMI)

Video Inputs: 2 × HD-VI /DVI, 2 × DVI-I / HDMI/VGA/YPbPr, 1 × HDMI / DVI, 1 × 3G-SDI, 1 × Display Port, 1 × CVBS/S-VIDEO (DVI-I multiplex)

Video Outputs: 2 × HDMI / DVI, 2 × DVI-I / HDMI / VGA / YPbPr, 1 × 3G-SDI, 1 × CVBS/S-VIDEO (DVI-I multiplex)

USB Interfaces: 2 × USB 2.0 Host

- Network Interfaces
- 10/100/1000 Base-T, 2 × RJ45
- 4F1 (Optional): G.703, G.704, 4 x RJ45 PSTN: 1 × RJ11(Only available in China) Wireless: Built-in Wi-Fi

COM Interfaces: 2 x RS232 COM

Languages: Simplified Chinese, Traditional Chinese, English, Japanese, Russian, French, Spanish, Portuguese, German, Finnish, Polish, Hungarian, Italian, Norwegian, Arabic, Swedish, Romanian, Czech, Turkish, Greek, Thai, Dutch, Malay, Indonesian

- Voice Dialing in English and Chinese USB auto data configuration

- VGA bypass Wireless Wi-Fi access
- Air content sharing
 Connect to two Omni-array Microphones (VPM220)
 Wireless MIC VPM220W access

- Multi-view: 3-view
 Integration with Microsoft Lync2010™ and OCS2007R2
- Hybrid with IMS network
- Lock Site/Conference SiteCall (HD dual-stream)
- Web-based conference management
 Web-based image monitoring and HD picture snapshot
- 16:9 and 4:3 mixed display Picture-in-picture: 1/16 picture size, optional position
- Split output: Bi-screen and tri-screen display
- LDAP/Network address book API for integration

- Digital Caption:

 Caption banner, body text and information bar
- Rolling display mode of the speech draft Modifiable front background color, caption size and transparency 64 optional colors
- Editable caption and auto zone adjustment Caption rolling mode setting Site name display and position shift Text input through remote control

- External character generator Powerful caption SMS function

Function Models: 1080p @ 60 fps

Maintenance Management

Maintenance Methods

- aintenance Methods
 Remote control: 3D Effects & GUI Animation
 Endpoints Network Management: SNMP
 Embedded Web server, GUI interface
 Command line mode: Telnet/SSH
 Wireless touch panel (Optional)

Maintenance Functions

- aintenance Functions
 Endpoint IP and number are displayed on the front panel
 Auto sleep, wake-up by remote control or remote module
 Event log record, query, and display, and export query results
 IP network test, default settings restoration
- Local and remote loopback
- Test signals: Providing sound test and standard test stripes

Physical Characteristics

- Codec dimensions (L x W x H): 435 mm x 265.5 mm x 72.5 mm
- Package dimensions (L x W x H): 545 mm x 355 mm x 220 mm Net weight: 4.6 kg Package Weight: 6.8 kg

- Working voltage: 100V to 240 V AC
- Working frequency: 50 Hz to 60 Hz Power consumption: 150 W
- Embedded AC/DC power module

Environmental Specification

- vironmental specification:
 Operating Temperature: 0° C to 40° C
 Operating Humidity: 10% to 80%
 Non-Operating Temperature: -40° C to -85° C
 Non-Operating Humidity (Non-condensing): 0% to 95%
- Peripheral noise: < 46 dBA SPL Lowest luminance: 7 lux
- Recommended luminance: > 300 lux

Approval and Compliance: CE, RoHS, WEEE, REACH, UL, CCC, FCC, VCCI, C-Tick

^{*:} G.722.1/G.722.1C, licensed from Polycom⁶