HUAWEI TE40

Commercial HD Video Conferencing Endpoint

Huawei TE40, the commercial HD video conferencing endpoint, provides robust performance, dual 1080p 60fps video, and AAC-LD audio. The Wi-Fi connection and air content sharing help to reduce clutter in the conference room. It brings lifelike experience to small and medium-sized video conferences.

Innovative technologies provide HD experience with low-bandwidth

TE40 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;

TE40 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

P2P to multipoint: The third-party can be added in a P2P call or called to connect to other multipoint conferences. No need to hang up the conference. This simplifies operation and improves efficiency.

Voice Dialing: TE40 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.

Wireless touch panel (Optional) for visualized control.

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.

Seamless integration with IMS.

Plentiful third-party APIs for system integration and customization.

Embedded MCU (Optional)

Max. capacity: 6-way 720p30 video sites+ 3-way VOIP sites.

Max. bandwidth: 6Mbps, 1Mbps per video site.

Universal transcoding: Hybrid access of HD/SD/VOIP endpoints; H.323 and SIP endpoints regardless of different protocols and bandwidths.

Auto CP on each port, voice activation, chairman token, broadcast site, H.239 and BFCP.

Multipoint conference recording and streaming is enabled with Huawei RSE6500.

HUAWEI TE40 Specifications

Unit delivered complete with:

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

Optional: HD Camera, Omni-array Microphone or wireless Microphone

Standards & Protocols

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

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

Audio Standards & Protocols: G.711, G.722, G.722.1*, G.722.1C*, G.728, G.719, G729, G.729A, AAC-LD, HWA-LD

Dual Stream: ITU-T H.239, BFCP

Other Standards: H.225, H.235, H.241, H.243, H.245, H.350, H.460, T.140, DTMF, H.281, H.224

Network Standards & Protocols: TCP/IP, FTP, FTPS, DHCP, SNMP, Telnet, SSH, HTTP, HTTPS with SSL/TLS, PPPoE, RTP, RTCP, SNTP, ARP, DNS, 802.1X, 802.1P, 802.1Q

Video Specifications and Features

People Video Resolution:
- 1080p @ 60 fps from 1Mbps (Optional)
- 1080p @ 30 fps from 512 Kbps (Optional)
- 1080i @ 60 fps from 512 Kbps (Optional)
- 720p @ 50/60 fps from 512 Kbps(Optional)
- 720p @ 25/30 fps from 384 Kbps
- 4SIF/4CIF from 128 Kbps
- SIF/CIF/QSIF/QCIF/SQSIF/SQCIF from 64 Kbps

Content 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, 1366 x 768 @ 60 fps, 1440 x 900 @ 60 fps, XGA+ (1400 x 1050) @ 60 fps, 720p @ 60/75/85 fps, 1080p @ 60/75/85 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 (Optional); Dual 720p @ 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

Security and Stability

Network:
- Dual-stack IPv6 and IPv4
- IP Precedence, Diffserv
- Uniform resource identifier (SIP and H.323 support up to 40 characters) dialing
- Super Error Concealment (SEC), Intelligent Rate Control (IRC)
- Automatic Repeat reQuest (ARQ), Forward Error Correction (FEC), PLC

Security:
- 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

Interfaces

Audio Inputs: 1×XLR, 2×RCA, 1×HDMI, 1×HD-AI (Mic Array/Audio external)

Audio Outputs: 4×RCA, 2×HDMI

Video Inputs: 1×HD-VI /DVI, 1×HDMI / DVI, 1×VGA/YPbPr,

Video Outputs: 2×HDMI / DVI, 1×VGA/YPbPr

USB Interfaces: 2×USB 2.0 Host

Network Interfaces:
- IP: 10/100/1000 Base-T, 2×RJ45
- Wireless: Built-in Wi-Fi

COM Interfaces: 2×RS232 COM

Connected Microphones: Two VPM220 or two VPM220W

Application Features

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

Special Features:
- Voice Dialing in English and Chinese
- USB auto data configuration
- VGA bypass
- Wireless Wi-Fi access
- Air content sharing
- Wireless MIC VPM220W access
- Multi-view: 2-view
- Hybrid with IMS network
- Lock Site/Conference
- P2P to multipoint
- Favorites in address book
- 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

Optional

Function Models: 1080p @ 60 fps, 1080p @ 30 fps, Embedded MCU

Maintenance Management

Maintenance 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
- 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

Dimensions:
- 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: 3.9 kg
- Package Weight: 5.8 kg

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

Environmental Specification:
- Operating Temperature: -5°C to 45°C
- Operating Humidity: 10% to 95%
- Non-Operating Temperature: -40°C to 70°C
- 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

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*: G.722.1/G.722.1C, licensed from Polycom®