

HUAWEI TX50

HD Videoconferencing Endpoint



The Huawei TX50 brings state-of-the-art H.265 technology to HD video conferencing. The TX50 endpoint's dual 1080p video and AAC-LD audio deliver face-to-face communication so lifelike, you will think you are all in the same room. Multi-view images are easily transmitted for a panoramic presentation. Built-in Wi-Fi reduces the need for cables and simplifies deployment, making the TX50 ideal for large and medium-sized conference rooms.

H.265 + VME technologies provide HD experience at low bandwidth

The TX50 supports resolutions up to dual 1080p to provide a full-HD experience.

A combination of H.265 and Huawei's Video Motion Enhancement (VME 2.0) reduces bandwidth requirements by 50%.

Intelligent face detection, frame rate doubling, and VME technologies improve clarity and smoothness.

The TX50 offers Hi-Fi audio using AAC-LD, Acoustic Echo Cancellation (AEC), and Acoustic Noise Suppression (ANS).

Feature-rich, intelligent, and easy to use

TX50 voice dialing recognizes Chinese and English. You can call or join a conference simply by saying the conference or site name.

Images from multiple cameras are transmitted in one compressed stream to minimize bandwidth and enable far-end sites to view live images from different angles.

Built-in Wi-Fi enables the TX50 to connect to networks and microphones without cables.

Multiple sites can share full HD content simultaneously, and any site can view any content as needed.

Setup data is auto-configured from a USB flash drive, providing secure and convenient plug-and-play.

A built-in VGA bypass allows local and remote conferences to share one VGA interface, keeping local data sharing active without plugging and unplugging cables even after a videoconferencing endpoint powers off.

User-friendly interface with remote control

Handheld IR&RF remote control simplifies use.

Optional wireless touch panel provides visualized remote control.

LCD display shows real-time local site information (IP address, conference number).

Innovative 3D GUI offers convenient menu access.

Outstanding network adaptability and security

Support for H.264 Scalable Video Coding (SVC) allows adaptation to different bandwidths, device capabilities, and network requirements. Patented Super Error concealment (SEC) ensures high-quality video even with packet loss at 20%.

Standard H.460 and proprietary Super Network Passport (SNP) ensure secure firewall traversal.

The TX50 provides H.235 media stream and signaling encryption for SRTP, TLS, and HTTPS.

Thorough compatibility

The TX50 interoperates with standard endpoints and infrastructures, including seamless integration with IP Multimedia Subsystem (IMS). The system integrates with Microsoft Lync 2010/2013™ and Office Communications Server 2007 R2.

Use of SiteCall makes multipoint conference setup as easy as making a phone call.

Third-party APIs simplify system integration and customization.

HUAWEI TX50 Specifications

Unit Includes
HD codec, remote control, cables, and power supply
Standards & Protocols
Multimedia framework protocol: ITU-T H.323, IETF SIP
Video standards & protocols: H.263, H.263+, H.264 BP, H.264 HP, H.264 SVC, RTV, H.265
Audio standards & protocols: G.711, G.722, G.722.1*, G.722.1C*, G.728, G.719, 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, PPPoE, RTP, RTCP, SNTP, 802.1X, 802.1P, 802.1Q
Video Specifications and Features
Live video resolution: H265: <ul style="list-style-type: none">1080p 60 fps from 768 Kbps (optional)1080p 30 fps from 384 Kbps720p 30 fps from 288 Kbps H264 HP: <ul style="list-style-type: none">1080p 60 fps from 1 Mbps (optional)1080p 30 fps from 512 Kbps720p 30 fps from 384 Kbps
Content video resolution: <ul style="list-style-type: none">Input: VGA (640 x 480) @ 60/72/75/85 fps, SVGA (800 x 600) @ 56/60/72/75/85 fps, XGA (1,024 x 768) @ 60/70/75/85 fps, 1,152 x 864 @ 60/75/85 fps, 1,280 x 600 @ 60 fps, WXGA (1,280 x 768) @ 60/75/85 fps, WXGA (1,280 x 800) @ 60/75/85 fps, 1,280 x 960 @ 60/75/85 fps, SXGA (1,280 x 1,024) @ 60/75/85 fps, 1,360 x 768 @ 60 fps, 1,366 x 768 @ 60 fps, 1,440 x 900 @ 60 fps, XGA+ (1,400 x 1,050) @ 60 fps, 720p @ 60/75/85 fps, 1080p @ 60 fps, 1,600 x 900 @ 60 fps, 1,600 x 1,200 @ 60 fps, 1,680 x 1,050 @ 60 fps, 1,920 x 1,200 @ 60 fpsEncoding and decoding resolution: 800 x 600, 1,024 x 768, 1,280 x 1,024, 1,280 x 720, 1,920 x 1,080, 1,600 x 1,200, 1,920 x 1,200Output: 800 x 600, 1,024 x 768, 1,280 x 1,024, 1,280 x 720, 1,920 x 1,080, 1,600 x 1,200, 1,920 x 1,200
Live dual stream: <ul style="list-style-type: none">H.264: dual 1080p 60 fps (optional), dual 1080p 30 fpsH.265: 1080p 60 fps + 1080p 30 fps (optional), dual 1080p 30 fps
Other video features: <ul style="list-style-type: none">Intelligent face detectionPicture-in-picturePicture-outside-pictureVideo Motion Enhancement (VME)Video intensifierView processing
Audio Features
AAC-LD, HWA-LD Acoustic Echo Cancellation (AEC), Automatic Noise Suppression(ANS), Automatic Gain Control (AGC), VoiceClear, Audio Enhancer Lip synchronization
Stability and Security
Network: <ul style="list-style-type: none">Dual-stack IPv6 and IPv4IP Precedence, DiffservUniform resource identifier dialingSuper Error concealment (SEC), Intelligent Rate Control (IRC)Automatic Repeat reQuest (ARQ), Forward Error Correction (FEC), PLC
Security: <ul style="list-style-type: none">H.235 signaling and media stream encryptionAES media stream encryption, TLS and SRTPSSH/HTTPS, dual-stream encryptionConference access password, conference control password, administrator's password
Firewall traversal: H.460, static NAT, SNP
Bandwidth
IP: 64 Kbps to 8 Mbps
Interfaces
Audio Inputs: 2 x XLR, 2 x RCA, 1 x HD-AI serial MIC interface; 1 x HDMI , 1 x Display Port Audio outputs: 4 x RCA, 3 x HDMI , 1 x DVI
Video inputs: <ul style="list-style-type: none">1 x HD-VI/DVI, 1 x CVBS,1 x DVI-I (HDMI/VA/YPbPr), 1 x Display Port (including audio input), 1 x HDMI (HDMI supports audio input), 1 x 3G-SDI
Video outputs: <ul style="list-style-type: none">3 x HDMI, 1 x DVI-I (HDMI/VA/YPbPr),1 x 3G-SDI, 1 x CVBS/S-Video (DVI-I converted to CVBS/S-Video)

USB Interfaces: 2 x USB 2.0 host
Network Interfaces: <ul style="list-style-type: none">IP: 10/100/1000 Base-T, 2 x RJ45Wireless: Wi-Fi
Serial ports: 2 x RS232 COM ports
Microphone cascading: 2 x VPM220 or 2 x 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, and Indonesian
Special features: <ul style="list-style-type: none">Voice dialing in English and ChineseUSB auto data configurationVGA bypassWi-Fi accessAir content sharingWireless MIC VPM220W accessMulti-view: dual-view, triple-viewIntegration with Microsoft Lync 2010™ / Lync 2013™ and OCS2007R2Integration with IMS networkLive dual stream, content lockWeb-based conference managementSiteCallWeb-based image monitoring and HD picture snapshot16:9 and 4:3 mixed displayPicture-in-picture: 1/16 picture size, optional positionSplit output: bi-screen and tri-screen displayLDAP/network address bookAPI for integration
Digital caption: <ul style="list-style-type: none">Caption banner, body text, and information barRolling display mode of a speech draftModifiable front background color, caption size and transparency64 optional colorsEditable caption and auto zone adjustmentCaption rolling mode settingSite name display and position shiftText input through remote controlExternal character generatorT.140 SMS function
Optional
<ul style="list-style-type: none">HD cameraOmni-array microphone or wireless microphone1080p 60 fps function module
Maintenance
Maintenance methods: <ul style="list-style-type: none">Remote control: 3D effects & GUI animation, 1080p full screenCommand line mode: Telnet/SSHEndpoint network management: SNMPEmbedded Web server, GUI interfaceWireless touch panel (optional)
Maintenance functions: <ul style="list-style-type: none">Endpoint IP and number are displayed on the front panelAuto sleep, wake-up by remote control or remote moduleLocal and remote loopbackEvent log record, query, and display, and export query resultsIP network test, default settings restorationEmbedded loopback function: local and remote loopbackTest signals: sound test and standard test stripes
Physical Characteristics
Dimensions: <ul style="list-style-type: none">Codec dimensions: 442 mm x 310 mm x 58 mmPackage dimensions: 580 mm x 450 mm x 215 mmNet weight: 6.1 kgPackage weight: 9.9 kg
Electrical: <ul style="list-style-type: none">Operating voltage: 100V to 240V ACOperating frequency: 50 Hz to 60 HzPower consumption: 170WEmbedded AC/DC power module
Environmental: <ul style="list-style-type: none">Operating temperature: 0°C to 40°COperating humidity: 10% to 80%Non-operating temperature: -40°C to 85°CNon-operating humidity (non-condensing): 0% to 95%Peripheral noise: < 46 dBA SPLLowest luminance: 7 luxRecommended luminance: > 300 lux
Approval and Compliance: <ul style="list-style-type: none">CCC, CE, RoHS, REACH, and WEEE

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