

# HUAWEI TE Series

## HD Detached Video Conferencing Endpoint



Huawei TE series brings state-of-the-art HD technology to HD video conferencing endpoints. This new series from Huawei delivers peak performance with dual 1080p 60fps video and AAC-LD audio, with a face-to-face communication experience so lifelike you will think you are in the same room. Multi-view images are easily transmitted to users simultaneously for a complete panoramic presentation. Numerous audio/video interface options and Wi-Fi connection integrate the conference room and simplify deployment, making the TE series the ideal choice for scenarios like administrative conferences and remote education video conferencing.

### Innovative Technologies Provide HD Experience with Low-bandwidth

TE Series 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;

TE Series 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: TE Series 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.

Wi-Fi Access: Built-in Wi-Fi enables TE Series to support wireless network, microphone.

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.

Integration with Microsoft Lync2010™ /Lync2013™ and OCS2007R2.

Seamless integration with IMS.

Plentiful third-party APIs for system integration and customization.

### Embedded MCU (Optional)

Max. capacity: 9-way HD video sites+ 3-way VOIP sites.

Max. bandwidth: 9Mbps, 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 TE Series 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, G.729, 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

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 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  
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)  
• Automatic Gain Control (AGC)  
• Voice Clear, Audio Enhancer  
• Lip synchronization

## Security and Stability

Security:  
• H.235 signaling and media stream encryption  
• AES media stream encryption, dual-stream encryption  
• Administrator password, SSH/HTTPS  
• TLS and SRTP for SIP signaling and media stream encryption  
• Conference access password, conference control password  
Firewall Traversal: H.460.18, H.460.19 firewall traversal, Static NAT, SNP  
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

## 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  
• Integration with Microsoft Lync2010™ / Lync2013™ and OCS2007R2  
• 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

## Maintenance Management

Maintenance Methods  
• Remote control: 3D Effects & GUI Animation  
• Command line mode: Telnet/SSH  
• Endpoints Network Management: SNMP  
• Embedded Web server, GUI interface  
• 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

Environmental 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

	TE40	TE50	TE60
positioning	Commercial	Professional	Flagship
Scenarios	Middle and small-sized conference rooms	Large and middle-sized conference rooms	Super sized conference rooms
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	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	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
Dual stream	Dual 1080p @ 60 fps (Optional); Dual 1080p @ 30 fps (Optional); Dual 720p @ 30 fps	Dual 1080p @ 60 fps (Optional); Dual 1080p @ 30 fps	Dual 1080p @ 60 fps (Optional); Dual 1080p @ 30 fps
Embedded MCU	6-way HD video sites+ 3-way VOIP sites	6-way HD video sites+ 3-way VOIP sites	9-way HD video sites+ 3-way VOIP sites
Video Inputs	1 x HD-VI / DVI, 1 x HDMI / DVI, 1 x VGA/YpPr	1 x HD-VI / DVI, 1 x HDMI / DVI, 1 x VGA/YpPr, 1 x 3G-SDI, 1 x CVBS	2 x HD-VI / DVI, 2 x DVI-I/HDMI/VGA/YpPr, 1 x HDMI / DVI, 1 x 3G-SDI, 1 x Display Port, 1 x CVBS/S-VIDEO (DVI-I multiplex)
Video Outputs	2 x HDMI / DVI, 1 x VGA/YpPr	2 x HDMI / DVI, 1 x VGA/YpPr, 1 x 3G-SDI, 1 x CVBS	2 x HDMI / DVI, 2 x DVI-I/HDMI/VGA/YpPr, 1 x 3G-SDI, 1 x CVBS/S-VIDEO (DVI-I multiplex)
Audio Inputs	1 x XLR, 2 x RCA, 1 x HDMI, 1 x HD-AI (Mic Array/Audio external)	1 x XLR, 2 x RCA, 1 x 3.5mm, 1 x HDMI, 1 x HD-AI (Mic Array/Audio external)	2 x XLR, 2 x RCA, 1 x HDMI, 1 x Display Port 1 x HD-AI (Mic Array/Audio external)
Audio Outputs	4 x RCA, 2 x HDMI	4 x RCA, 2 x HDMI	4 x RCA, 2 x HDMI, 2 x DVI-I (DVI converted to HDMI)
Other Interfaces	IP: 10/100/1000 Base-T, 2xRJ45; Wireless: Built-in Wi-Fi; 2xRS232 COM, 2xUSB 2.0 Host	IP: 10/100/1000 Base-T, 2 x RJ45; Wireless: Built-in Wi-Fi; 2 x RS232 COM, 2 x USB 2.0 Host	4E1 (Optional): G.703, G.704, 4 x RJ45; IP: 10/100/1000 Base-T, 2 x RJ45 Wireless: Built-in Wi-Fi; 2 x RS232 COM, 2 x USB 2.0 Host
Connected Microphones	Two VPM220 or two VPM220W	Two VPM220 or two VPM220W	Three VPM220 or three VPM220W
Multi-view	2-view	3-view	3-view
Bandwidth	IP: 64kbps ~ 8Mbps	IP: 64kbps ~ 8Mbps	IP: 64kbps ~ 8Mbps 4E1: 64kbps ~ 8Mbps
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	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: 4.1 kg Package Weight: 6.0 kg	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
Electrical	Working voltage: 100V to 240V AC Working frequency: 50 Hz to 60 Hz Power consumption: 60 W Embedded AC/DC power module	Working voltage: 100V to 240V AC Working frequency: 50 Hz to 60 Hz Power consumption: 60 W Embedded AC/DC power module	Working voltage: 100V to 240V AC Working frequency: 50 Hz to 60 Hz Power consumption: 150 W Embedded AC/DC power module

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