

HUAWEI TE20

All-in-One HD Videoconferencing System



This all-in-one HD videoconferencing endpoint combines innovative features and cost-effective design. It is an ideal choice for small- and medium-sized conference rooms.

All-in-one design, 5 minutes to set up

Compact system with built-in camera and microphone; simplified interface for easy connections and installation
USB configuration wizard for quick self-service “plug-and-play”
Multiple installation methods: on top of TV, mounted on wall or ceiling

Unique, fan-shaped interactive interface

Tiered menu and user-friendly button design that users can operate effortlessly

User experience improved by state-of-the-art audio and video technologies

5x/12x optical zoom camera with a maximum 80°wide-angle, 1080p HD video
New STARVIS imaging technology enables clear images under low light conditions
Microphone voice pickup radius of 6 meters, AAC-LD wideband audio; hi-fi audio enhanced by Acoustic Echo Cancellation (AEC) and Automatic Noise Suppression (ANS) technologies
Easy access with built-in 2.4G/5G dual-frequency Wi-Fi
Easy share content on the PC, smartphone or tablet without cables through the AirPresence
One button to share content on the PC with AirPresence Key, which is matched with PC’s USB interface

New technology for superior experience over low bandwidth

Video Motion Enhancement (VME) combined with image pre-and post-processing of images helps TE20 adapt to different lighting conditions and improve video quality
H.264 HP technology enhances image compression ratio and saves 50 percent of bandwidth

Network adaptability and security mechanism

Patented Super Error Concealment (SEC) ensures high-quality video experience even with 20 percent packet loss
H.460 standard guarantees secure firewall traversal
H.235 media stream and signaling, SRTP, TLS, and HTTPS encryption

Open, converged, and extensive system integration

Interworking with mainstream third-party cloud platforms and auto-configuration by service provisioning from the Videxio platform
Seamless integration with IMS
Interoperable with standard endpoints and infrastructures from mainstream vendors
Abundant API interfaces, implementing flexible integration with third-party service platforms

HUAWEI TE20 Specifications

Packet includes

HD codec, built-in camera and microphone, cables, remote control, and power

Optional: VPM220 omni-directional microphone, and AirPresence Key

Standard & Protocols

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

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

Audio Standards & Protocols: G.711A, G.711U, G.722, G.722.1C*, G.729A, Opus, and AAC-LD single-channel

Dual Stream: ITU-T H.239, BFCP

Other Standards: H.235, H.245, H.460, DTMF, and RFC2833

Network Standards & Protocols: FTP, FTPS, DHCP, SNMP, Telnet, SSH, HTTP, HTTPS, SNTp, RTP, RTCP and TR-069

Wi-Fi Protocols: 802.11a/b/g/n, WPA, WPA2

Video Specifications and Features

People Video Resolution:

- 1080p30 from 512 kbit/s
- 720p60 from 512 kbit/s
- 720p30 from 384 kbit/s
- 4SIF/4CIF from 128 kbit/s
- SIF/CIF from 64 kbit/s

Content Video Resolution:

- Input:
 - HDMI: 640 x 480 @ 60/72/75/85 fps; 800 x 600 @ 56/60/72/75/85 fps; 1,024 x 768 @ 60/70/75/85 fps; 1,152 x 864 @ 60 fps; 1,280 x 600 @ 60 fps; 1,280 x 768 @ 60 fps; 1,280 x 800 @ 60 fps; 1,366 x 768 @ 60 fps; 1,366 x 768 @ 60 fps; 720p @ 50/60 fps; 1,080p @ 24/25/30 fps
 - VGA: 640 x 480 @ 60/72/75/85 fps; 800 x 600 @ 56/60/72/75/85 fps; 1,024 x 768 @ 60/70/75/85 fps; 1,152 x 864 @ 60 fps; 1,280 x 600 @ 60 fps; 1,280 x 768 @ 60 fps; 1,280 x 800 @ 60 fps; 1,366 x 768 @ 60 fps; 1,366 x 768 @ 60 fps; 720p @ 60 fps
- Coding/Decoding resolution: 800 x 600; 1,024 x 768; 1,280 x 720
- Output: 1080p @ 24/25/30/50/60 fps

Dual Stream: 1080p @ 30 fps + 1080p @ 5 fps; Dual 720p @ 30 fps

1080p HD Camera:

- Built-in camera
- 1080p
- 2.13-megapixel 1/2.8-inch CMOS
- Zoom: 5x /12x optical
- Maximum horizontal angle: 80°(5 x optical zoom)/ 72°(12 x optical zoom)
- Panning/Tilting angle: +/- 90° pan, +/-25° tilt
- Automatic White Balance (AWB)
- Automatic Exposure (AE)
- Automatic Focus (AF)
- Ceiling-mounted

Other Video Features:

- Picture-in-Picture (PIP) and Picture-outside-Picture (POP)

Audio Specifications and Features

Audio features:

- AAC-LD
- Acoustic Echo Cancellation (AEC)
- Automatic Noise Suppression (ANS)
- Automatic Gain Control (AGC)
- Voice Clear
- Audio Enhancer
- Lip Synchronization

Security and Stability

Network:

- Dual-stack IPv6 and IPv4
- IP Precedence, Diffserv
- Super Error Concealment (SEC)
- Automatic Repeat-reQuest (ARQ), Forward Error Correction (FEC)

Security:

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

Firewall Traversal: H.460 firewall traversal

Bandwidth

IP: 64 kbit/s to 4Mbit/s

Interfaces

Audio Inputs: 1xHDMI, 1 x HD-AI (stereo connects to microphone array)

Audio Outputs: 1 x 3.5 mm line-out jack, 2 x HDMI

Video Inputs: 1 x VGA, 1 x HDMI, and 1 x Built-in Camera

Video Outputs: 2 x HDMI

USB Interfaces: 1 x USB 2.0 Host

Network Interfaces:

- IP: 1 x RJ45 jack(10/100/1,000M Base-T)
- Wireless: Built-in Wi-Fi

Application Features

Languages: Simplified Chinese, English, French, German, Spanish, Japanese, Russian, Traditional Chinese, Portuguese, and Italian

Special Features:

- Install from a USB disk, plug-and-play
- Dual-frequency Wi-Fi
- Upside-down mounting
- Web-based conference management
- 16:9 and 4:3 mixed display
- PIP: 1/16 picture size, optional position
- Split output: Bi-screen and tri-screen display
- LDAP/Network address book
- Interconnection with third-party cloud platforms
- Hybrid with IMS network
- Conference control using SIP, SiteCall
- One-button-to-join

Optional

Accessories: VPM220 microphone, and AirPresence Key

Maintenance Management

Maintain Methods:

- Remote control: simple buttons, and flat interactive interface
- Endpoints Network Management: SNMP
- Web security management: embedded Web server, graphical maintenance, and diagnosis
- Command line mode: Telnet/SSH

Maintain Functions:

- Auto sleep, wake up by remote control or module
- Event log record, query, display and export query results
- Default settings restoration
- Local and remote loopback
- Test signals: sound test and standard test stripes

Physical Characteristics

Dimensions:

- Codec dimensions: 249 mm x 140 mm x 153 mm
- Package dimensions: 375 mm x 230 mm x 215 mm
- Net weight: 1.6 kg
- Package weight: 4.1 kg (5 x optical zoom), 4.2 kg (12 x optical zoom)

Electrical:

- Working voltage: 100V AC to 240V AC, 12V DC
- Working frequency: 50 Hz to 60 Hz
- Power consumption: 25W

Environmental Specification:

- Operating Temperature: 0°C to 40°C
- Non-Operating Temperature: -40°C to -70°C
- Operating Humidity: 10% to 90%
- Non-Operating Humidity (Non-condensing): 10% to 90%
- Peripheral noise: < 46 dBA SPL
- Lowest luminance: 7 lux
- Recommended luminance: > 300 lux

Approval and Compliance: CCC, CE (RoHS, REACH, WEEE), UL, FCC, IC, VCCI, RCM, and Multi-Country Certificate

Interfaces shows



* G.722.1/G.722.1C, licensed from Polycorn®