Huawei Telepresence and VideoConference Product Manual

HUAWEI TECHNOLOGIES CO., LTD.

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Product Portfolio

Huawei TP3106

Ultimate HD Telepresence, Immersive Experience and Easy to Use.

In today's fast-paced global economy, business is being made between companies and partners distributed around the world, day and night. It is obvious that he who is acting fast upon the market demand will win the game.

Huawei TP3106 is the first 1080P 50/60fps Telepresence worldwide, brings people together in a best ever virtual meeting experience with the European industry design idea ,comfortable, immediately and enjoyable. Synergy between people creates value, reduce cost and help you stay ahead of competition.

Immersive Experience With HD Video and Directional Sound

Huawei telepresence TP3106 offers real-life telepresence experience at lower bandwidth by VME(Video Motion Enhancement) and HP(High Profile) dual core drive. We have combined the best of video, audio and collaboration technologies. TP3106 has dual 1080P resolution for content sharing. With 6 MICs and AAC-LD triple-tracks-broadband audio , TP3106 brings you the perfect telepresence experience.

Ease of Use: Integrated System Control via Touch Screen

Easy of use is a long time obstacle for videoconference industry and people hate that complicated and dull remote control. With a re-designed innovative trendy, neat and well organized touchscreen GUI, Huawei TP3106 employs worldwide first Android tablet for the conference control ,and now is standing out of competition

Affordable, Cost-effective Solution

IP technology is evolving, but there are always times that the live video quality is undermined due to QoS issues. With Huawei SEC (super error concealment) and IRC (intelligent rate control) technology, Huawei TP3106 is able to keep producing good video quality even if there are significant packets loss or low bandwidth, latency and jitter over the network link.

Standard-based, Highly Interoperable

Huawei develops standard-based telepresence system , make sure it's highly interoperable with mainstream telepresence equipments, including telepresence based on TIP.
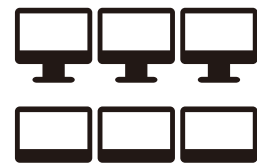Worrying about security of your videoconference call? Huawei TP3106 adopts standard-based H.235 and AES encryption techniques to ensure that your videoconference call is well protected from malicious hacking and sniffing. The device configuration and setup is locked by admin password to avoid any misplay.

Huawei TP3106 Key Features	
Video Quality	High Definition Standard-based 1920x1080-60fps 1280x720-60fps
Content Quality	HD: 1920×1080
HD Monitors	3 Video,3 Data
HD Cameras	
Hi-Fi Audio	

TP3106 Specifications

System Components
- 3 pieces of 22" 16:9 extra content screen
- 3 Huawei VP9039A-T codec
- Telepresence Camera TC301
- Crystal audio with AAC-LD 48KHz spatial sound
- Telepresence Intelligence Control software
- Laptop/content input accessory
- Android based touch screen control panel
- Power supplies
- Accessory kit
- Furniture (not include chair)

Telecom Standards & Protocols
- ITU-T H.323/H.320,IETF SIP

Video Standards & Protocols
- H.264,H.263,H.263+,H.261
- 1080p(50/60fps), 1080p(25/30fps), 720p (50/60fps),720p(25/30fps), 4CIF, CIF
- Bandwidth Requirements

Frame	Minimum	Recommended
720p 30fps	768Kbps per codec	1.5Mbps per codec
720p 60fps	1Mbps per codec	2Mbps per codec
1080p 30fps	1Mbps per codec	2Mbps per codec
1080p 60fps	2Mbps per codec	4Mbps per codec

Content Video Resolution
- H.239
- SXGA (1280×1024), XGA (1024×768), SVGA(800×600), VGA (640×480)
- Support for multiple dual Live stream mode:
  -1080p(25/30fps) and1080p(25/30fps)
  -720p(50/60fps) and 720p(50/60fps)
  -720p(25/30fps) and 720p(25/30fps)

Audio Standards & Protocols
- AAC-LD,HWA-LD,G.722,G.711,G.728
- HWA-LD : Huawei broadband audio Low Delay
- Acoustic Echo Cancellation (AEC)
- Acoustic Noise Suppression (ANS) 12 dB
- Automatic Gain Control (AGC) ±6 dB
- VoiceClear
- AudioEnhancer

Other ITU-Supported 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

User Interface
- Languages: English, Chinese
- Control mode: Touchscreen, Remote control, Telnet, Web

Security
- H.235 signaling and media stream encryption
- AES media stream encryption
- Conference access password
- Conference control password
- Administrator password
- H.323 ID and number binding
- IP address and number binding

Special Features
- Hybrid with IMS Network
- Active caption
- Group function
- SiteCall (HD dual stream)
- Call record
- Network address book
- Intelligent rate control (IRC)
- Super error concealment (SEC)
- LDAP

Maintenance Management
- Local and remote loopback
- Test signals: providing test sound and standard test stripes
- Volume input indication
- IP network test
- Telnet: command line mode; providing user-level and administrator-level login accounts
- Local and remote software upgrades
- Embedded Web server, GUI interface
- Indication for network package loss
- Event log record
- Default settings restoration

Approval and Compliance
- CE
- RoHS

Electrical
- Working voltage: 100-240V AC
- Working frequency: 50-60Hz
- Power consumption: <3.2kw

Environmental Specification
- Operating Temperature: 0-40°C
- Operating Humidity: 20-80%
- Non-Operating Temperature: -20°-60°C
- Peripheral noise: < 40 dBA SPL
- Recommended illuminance: > 450 lux

Physical Characteristics
- Dimensions(L×W×H):5600mm×3200mm×1840mm
- Weight: <1500 kg

Huawei TP3118

Ultimate HD Telepresence, Immersive Experience and Easy to Use.

In today's fast-paced global economy, business is being made between companies and partners distributed around the world, day and night. It is obvious that he who is acting fast upon the market demand will win the game.

Huawei TP3118 brings people together in a best ever virtual meeting experience with the European industry design idea , comfortable, immediately and enjoyable. Synergy between people creates value, reduce cost and help you stay ahead of competition.

Immersive Experience With HD Video and Directional Sound

Huawei telepresence TP3118 offers real-life telepresence experience at lower bandwidth by VME(Video Motion Enhancement) and HP(High Profile) dual core drive. We have combined the best of video, audio and collaboration technologies. TP3118 has dual 1080p resolution for content sharing. With 16 MICs and AAC-LD triple-tracks-broadband audio , TP3118 brings you the perfect telepresence experience.

Ease of Use: Integrated System Control via Touch Screen

Easy of use is a long time obstacle for videoconference industry and people hate that complicated and dull remote control. With a re-designed innovative trendy, neat and well organized touch-screen GUI, Huawei TP3118 employs worldwide first Android tablet for the conference control ,and now is standing out of competition.

Affordable, Cost-effective Solution

IP technology is evolving, but there are always times that the live video quality is undermined due to QoS issues. With Huawei SEC (super error concealment) and IRC (intelligent rate control) technology, Huawei TP3118 is able to keep producing good video quality even if there are significant packets loss or low bandwidth, latency and jitter over the network link.

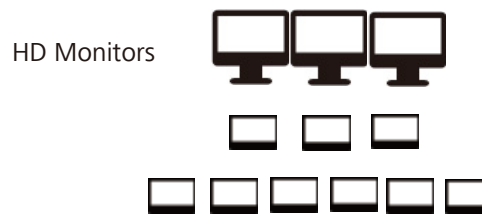### Standard-based, Highly Interoperable

Huawei develops standard-based telepresence system , make sure it's highly interoperable with mainstream telepresence equipments, including telepresence based on TIP.

Worrying about security of your videoconference call Huawei TP3118 adopts standard-based H.235 and AES encryption techniques to ensure that your videoconference call is well protected from malicious hacking and sniffing. The device configuration and setup is locked by admin password to avoid any misplay.

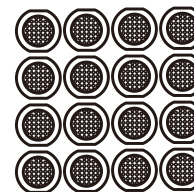| Huawei TP3118 Key Features	
Video Quality	High Definition Standard-based 1920x1080 - 60fps 1280x720 - 60fps
Content Quality	HD: 1920x1080
HD Monitors	3 Video ,9 Data
HD Cameras	
Hi-Fi Audio	

TP3118 Specifications

System Components
- 9 pieces of 22" 16:9 extra content screen
- 3 Huawei VP9039A-T codec
- Telepresence Camera TC310
- Crystal audio with AAC-LD 48KHz spatial sound
- Telepresence Intelligence Control software
- Laptop/content input accessory
- Android based touch screen control panel
- Power supplies
- Accessory kit
- Furniture (not include chair)

Telecom Standards & Protocols
- ITU-T H.323/H.320,IETF SIP

Video Standards & Protocols
- H.264,H.263,H.263+,H.261
- 1080p(50/60fps), 1080p(25/30fps), 720p(50/60fps), 720p(25/30fps), 4CIF, CIF
- Bandwidth Requirements

Frame	Minimum	Recommended
720p 30fps	768Kbps per codec	1.5Mbps per codec
720p 60fps	1Mbps per codec	2Mbps per codec
1080p 30fps	1Mbps per codec	2Mbps per codec
1080p 60fps	2Mbps per codec	4Mbps per codec

Content Video Resolution
- H.239
- SXGA (1280$\times$1024), XGA (1024$\times$768), SVGA(800$\times$600), VGA (640$\times$480)
- Support for multiple dual Live stream mode:
  - 1080p(25/30fps) and1080p(25/30fps)
  - 720p(50/60fps) and 720p(50/60fps)
  - 720p(25/30fps) and 720p(25/30fps)

Audio Standards & Protocols
- AAC-LD,HWA-LD,G.722,G.711,G.728
- HWA-LD : Huawei broadband audio Low Delay
- Acoustic Echo Cancellation (AEC)
- Acoustic Noise Suppression (ANS) 12 dB
- Automatic Gain Control (AGC) ±6 dB
- VoiceClear
- AudioEnhancer

Other ITU-Supported 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

User Interface
- Languages: English,Chinese
- Control mode: Touchscreen, Remote control, Telnet, Web

Security
- H.235 signaling and media stream encryption
- AES media stream encryption
- Conference access password
- Conference control password
- Administrator password
- H.323 ID and number binding
- IP address and number binding

Special Features
- Hybrid with IMS Network
- Active caption
- Group function
- SiteCall (HD dual stream)
- Call record
- Network address book
- Intelligent rate control (IRC)
- Super error concealment (SEC)
- LDAP

Maintenance Management
- Local and remote loopback
- Test signals: providing test sound and standard test stripes
- Volume input indication
- IP network test
- Telnet: command line mode; providing user-level and administrator-level login accounts
- Local and remote software upgrades
- Embedded Web server, GUI interface
- Indication for network package loss
- Event log record
- Default settings restoration

Approval and Compliance
- CE
- RoHS

Electrical
- Working voltage: 100–240V AC
- Working frequency: 50–60Hz
- Power consumption: <3.2kw

Environmental Specification
- Operating Temperature: 0-40°C
- Operating Humidity: 20-80%
- Peripheral noise: < 40 dBA SPL
- Recommended illuminance: > 450 lux

Physical Characteristics
- Dimensions(L$\times$W$\times$H):7790mm$\times$5630mm$\times$1840mm
- Weight: <2000 kg

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Huawei TP3118S

Ultimate HD Telepresence, Immersive Experience and Easy to Use.

In today's fast-paced global economy, business is being made between companies and partners distributed around the world, day and night. It is obvious that he who is acting fast upon the market demand will win the game.

Huawei TP3118S brings people together in a best ever virtual meeting experience with the European industry design idea , comfortable, immediately and enjoyable. Synergy between people creates value, reduce cost and help you stay ahead of competition.

Immersive Experience With HD Video and Directional Sound

Huawei telepresence TP3118S offers real-life telepresence experience at lower bandwidth by VME(Video Motion Enhancement) and HP(High Profile) dual core drive. We have combined the best of video, audio and collaboration technologies. TP3118S has dual 1080p resolution for content sharing. With 12 MICs and AAC-LD triple-tracks-broadband audio , TP3118S brings you the perfect telepresence experience.

Ease of Use: Integrated System Control via Touch Screen

Easy of use is a long time obstacle for videoconference industry and people hate that complicated and dull remote control. With a re-designed innovative trendy, neat and well organized touch-screen GUI, Huawei TP3118S employs worldwide first Android tablet for the conference control ,and now is standing out of competition.

Affordable, Cost-effective Solution

IP technology is evolving, but there are always times that the live video quality is undermined due to QoS issues. With Huawei SEC (super error concealment) and IRC (intelligent rate control) technology, Huawei TP3118S is able to keep producing good video quality even if there are significant packets loss or low bandwidth, latency and jitter over the network link.

Standard-based, Highly Interoperable

Huawei develops standard-based telepresence system , make sure it's highly interoperable with mainstream telepresence equipments, including telepresence based on TIP.
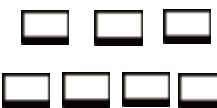
Worrying about security of your videoconference call Huawei TP3118S adopts standard-based H.235 and AES encryption techniques to ensure that your videoconference call is well protected from malicious hacking and sniffing. The device configuration and setup is locked by admin password to avoid any misplay.

Huawei TP3118S Key Features	
Video Quality	High Definition Standard-based 1920x1080 - 60fps 1280x720 - 60fps
Content Quality	HD: 1920x1080
HD Monitors	3 Video ,7 Data
HD Cameras	
Hi-Fi Audio	

TP3118S Specifications

System Components
- 7 pieces of 22" 16:9 extra content screen
- 3 Huawei VP9039A-T codec
- Telepresence Camera TC310
- Crystal audio with AAC-LD 48KHz spatial sound
- Telepresence Intelligence Control software
- Laptop/content input accessory
- Android based touch screen control panel
- Power supplies
- Accessory kit
- Furniture (not include chair)

Telecom Standards & Protocols
- ITU-T H.323/H.320,IETF SIP

Video Standards & Protocols
- H.264,H.263,H.263+,H.261
- 1080p(50/60fps), 1080p(25/30fps), 720p(50/60fps), 720p(25/30fps), 4CIF, CIF
- Bandwidth Requirements

Frame	Minimum	Recommended
720p 30fps	768Kbps per codec	1.5Mbps per codec
720p 60fps	1Mbps per codec	2Mbps per codec
1080p 30fps	1Mbps per codec	2Mbps per codec
1080p 60fps	2Mbps per codec	4Mbps per codec

Content Video Resolution
- H.239
- SXGA (1280$\times$1024), XGA (1024$\times$768), SVGA(800$\times$600), VGA (640$\times$480)
- Support for multiple dual Live stream mode:
  -1080p(25/30fps) and1080p(25/30fps)
  -720p(50/60fps) and 720p(50/60fps)
  -720p(25/30fps) and 720p(25/30fps)

Audio Standards & Protocols
- AAC-LD,HWA-LD,G.722,G.711,G.728
- HWA-LD : Huawei broadband audio Low Delay
- Acoustic Echo Cancellation (AEC)
- Acoustic Noise Suppression (ANS) 12 dB
- Automatic Gain Control (AGC) ±6 dB
- VoiceClear
- AudioEnhancer

Other ITU-Supported 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

User Interface
- Languages: English,Chinese
- Control mode: Touchscreen, Remote control, Telnet, Web

Security
- H.235 signaling and media stream encryption
- AES media stream encryption
- Conference access password
- Conference control password
- Administrator password
- H.323 ID and number binding
- IP address and number binding

Special Features
- Hybrid with IMS Network
- Active caption
- Group function
- SiteCall (HD dual stream)
- Call record
- Network address book
- Intelligent rate control (IRC)
- Super error concealment (SEC)
- LDAP

Maintenance Management
- Local and remote loopback
- Test signals: providing test sound and standard test stripes
- Volume input indication
- IP network test
- Telnet: command line mode; providing user-level and administrator-level login accounts
- Local and remote software upgrades
- Embedded Web server, GUI interface
- Indication for network package loss
- Event log record
- Default settings restoration

Approval and Compliance
- CE
- RoHS

Electrical
- Working voltage: 100–240V AC
- Working frequency: 50–60Hz
- Power consumption: <3.2kw

Environmental Specification
- Operating Temperature: 0-40°C
- Operating Humidity: 20-80%
- Peripheral noise: < 40 dBA SPL
- Recommended illuminance: > 450 lux

Physical Characteristics
- Dimensions(L$\times$W$\times$H):5750mm$\times$5600mm$\times$1840mm
- Weight: <1850 kg

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Huawei TP3006

Ultimate HD Telepresence, Immersive Experience and Easy to Use.

In today's fast-paced global economy, business is being made between companies and partners distributed around the world, day and night. It is obvious that he who is acting fast upon the market demand will win the game.

Huawei TP3006 brings people together in a best ever virtual meeting experience, immediately and enjoyable. Synergy between people creates value, reduce cost and help you stay ahead of competition.

Immersive Experience With HD Video and Directional Sound

Huawei Telepresence TP3006 offers a real-life telepresence experience. We have combined the best of video, audio and collaboration technologies. TP3006 has immersive HD video, HD audio and HD content quality.

Ease of Use: Integrated System Control via Touch Screen

Easy of use is a long time obstacle for videoconference industry and people hate that complicated and dull remote control. With a re-designed innovative trendy, neat and well organized touchscreen GUI, Huawei TP3006 is standing out of competition.

Affordable, Cost-effective Solution

IP technology is evolving, but there are always times that the live video quality is undermined due to QoS issues. With Huawei SEC (super error concealment) and IRC (intelligent rate control) technology, Huawei TP3006 is able to keep producing good video quality even if there are significant packet loss or low bandwidth, latency and jitter over the network link.

Standard-based, Highly Interoperable

Huawei develops standard-based telepresence system , make sure it's highly interoperable with mainstream telepresence equipments, including telepresence based on TIP.

Worrying about security of your videoconference call? Huawei TP3006 adopts standard-based H.235 and AES encryption techniques to ensure that your videoconference call is well protected from malicious hacking and sniffing. The device configuration and setup is locked by admin password to avoid any misplay.

Huawei TP3006 Key Features	
Video Quality	High Definition Standard-based 1920x1080 – 50/60fps 1280x720-60fps
Content Quality	SXGA: 1280x1024
HD Monitors	3 Video , 1 Data
HD Cameras	
HD Audio	

TP3006 Specifications

System Components
- 3 Huawei VP9039A-T codec
- Telepresence Camera TC301
- HiFi Microphone
- Telepresence Intelligence Control software
- Laptop/content input accessory
- 8.4"Color Touchscreen
- Power supplies
- Accessory kit
- Furniture (not include chair)

Telecom Standards & Protocols
- ITU-T H.323/H.320, IETF SIP

Video Standards & Protocols
- H.264, H.263, H.263+, H.261
- 1080p(50/60fps), 1080p(25/30fps), 720p (50/60fps), 720p(25/30fps), 4CIF, CIF
- Bandwidth Requirements

Frame	Minimum	Recommended
720p 30fps	768Kbps per codec	1.5Mbps per codec
720p 60fps	1Mbps per codec	2Mbps per codec
1080p 30fps	1Mbps per codec	2Mbps per codec
1080p 60fps	2Mbps per codec	4Mbps per codec

Content Video Resolution
- H.239
- SXGA (1280x1024), XGA (1024x768), SVGA(800x600), VGA (640x480)
- Support for multiple dual Live stream mode:
  -1080p(25/30fps) and 1080p(25/30fps)
  -720p(50/60fps) and 720p(50/60fps)
  -720p(25/30fps) and 720p(25/30fps)

Audio Standards & Protocols
- AAC-LD,G.722, G.711, G.728
- HWA-LD : Huawei broadband audio Low Delay
- Acoustic Echo Cancellation (AEC)
- Acoustic Noise Suppression (ANS) 12 dB
- Automatic Gain Control (AGC) ± 6 dB
- VoiceClear
- AudioEnhancer

Other ITU-Supported 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

User Interface
- Languages: English, French, Spanish, Portuguese, Russian, German, Chinese
- Control mode: Touchscreen, Remote control, Telnet, Web

Security
- H.235 signaling and media stream encryption
- AES media stream encryption
- Conference access password
- Conference control password
- Administrator password
- H.323 ID and number binding
- IP address and number binding

Special Features
- Hybrid with IMS Network
- Active caption
- Group function
- SiteCall (HD dual stream)
- Call record
- Network address book
- Intelligent rate control (IRC)
- Super error concealment (SEC)

Maintenance Management
- Local and remote loopback
- Test signals: providing test sound and standard test stripes
- Volume input indication
- IP network test
- Telnet: command line mode; providing user-level and administrator-level login accounts
- Local and remote software upgrades
- Embedded Web server, GUI interface
- Indication for network package loss
- Event log record
- Default settings restoration

Approval and Compliance
- CE
- RoHS

Electrical
- Working voltage: 100-240V AC
- Working frequency: 50-60Hz
- Power consumption: <4kw

Environmental Specification
- Operating Temperature: 0℃-40℃
- Operating Humidity: 10-80%
- Non-Operating Temperature: -40℃-70℃
- Peripheral noise: < 40 dBA SPL
- Recommended illuminance: > 450 lux

Physical Characteristics
- Dimensions (LxWxH):5000mmx3100mmx1700mm
- Weight:1300 kg

HUAWEI

Huawei RoomPresence Series
1080p Room Telepresence System

In today's fast-paced global economy, business is being made between companies and partners distributed around the world, day and night. It is obvious that he who is acting fast upon the market demand will win the game.

Huawei RoomPresence series room telepresence system brings people together in HD virtual meeting experience, immediately and enjoyable. Synergy between people creates value, reduce cost and help you stay ahead of competition.

Easy of use is a long time obstacle for videoconference industry and people hate that complicated and dull remote control. With a re-designed innovative remote, trendy, neat and well organized GUI, Huawei RoomPresence series is standing out of competition. You will love it.

HD video is nice, but sound effect is more essential during a conference call. By employing AAC-LD, HWA-LD and other standard-based wide band audio technology, Huawei RoomPresence series can deliver best of the breed sound experience to make people feel being there.

Worrying about security of your videoconference call. Huawei RoomPresence series adopts standard-based H.235 and AES encryption techniques to ensure that your videoconference call is well protected from malicious hacking and sniffing. The device configuration and setup is locked by admin password to avoid any misplay.

Flexible options
Multi size (55", 46", 40") LCD sreens for selection
Dual and Single monitor for selection

RP100-46: Single 46" LCD monitor
RP100-40: Single 40" LCD monitor

RP200-46:Dual 46" LCD monitors
RP200-40:Dual 40" LCD monitors

RP100-55: Single 55" LCD monitor

Huawei RoomPresence System Specifications

System Components
- VP Series HD Codec
- VPC Sereis HD PTZ Camera
- Digital microphone Array M210
- Monitor: 55" LCD, 46" LCD, 40" LCD, 16:9, 1920×1080 resolution
- Remote control or touch panel control*

Bandwidth
- H.323/SIP up to 8M (RP100-55 only)
- H.323/SIP up to 4M (RP200-46, RP200-40, RP100-46, RP100-40)
- Bandwidth Requirements

Frame	Minimum	Recommended
720p30fps	768Kbps	1.5Mbps
720p60fps	1Mbps	2Mbps
1080p30fps	1Mbps	2Mbps

Video Standards & Protocols
- H.264, H.263, H.263+, H.261
- H.239

People Video Resolutionn
- 1080p, 720p, 4CIF, CIF
- 1080p(30fps), 720p(50/60fps), 720p(30fps)

Content Video Resolution
- SXGA (1280×1024), XGA (1024×768), SVGA(800×600), VGA (640×480)
- Dual Live stream mode: Dual 720 30p live stream

Audio Standards & Protocols
- AAC-LD Stereo, G.722, G.711, G.728
- 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
- VoiceClear
- AudioEnhancer

Other ITU-Supported 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

Interface
- Video Input:
  2×DVI/ YPbPr / VGA
  1×HD-SDI (Only RP100-55)
- Video output:
  2×DVI/ YPbPr / VGA
  1×HD-SDI (Only RP100-55)
- Audio input:
  1×RJ45(for Microphone Array)

- Audio output:
  2×RCA (Stereo, connects to video recorder)
  2×RCA (Stereo, connects to the audio input interface on TV set)
- Network Interface:
  IP: 10/100Base-T、2×RJ-45
  E1: H.320、1×RJ-45
  4E1: G.703、G.704、4×RJ-45
  PSTN: RJ11

User Interface
- Languages: English,Chinese

Built-in MCU (Optional)
- 6 HD video sites and 3 audio sites

Security
- H.235 signaling and media stream encryption
- AES media stream encryption
- Conference access password
- Conference control password
- Administrator password
- H.323 ID and number binding
- IP address and number binding

Digital Caption
- Caption banner, body text and information bar
- Rolling display mode of the speech draft
- What-you-see-is-what-you-get (WYSIWYG) caption editing

Maintenance Management
- Local and remote loopback
- Test signals: providing test sound and standard test stripes
- Volume input indication
- IP network test
- Telnet: command line mode; providing user-level and administrator-level login accounts
- Local and remote software upgrades
- Embedded Web server, GUI interface
- Indication for network package loss
- Event log record
- Default settings restoration

Special Features
- Hybrid with IMS Network
- Power-on picture
- Picture-in-picture: 1/16 picture size, optional position
- 16:9 and 4:3 mixed display
- Split output: Bi-screen and tri-screen display

- Active caption
- Group function
- SiteCall (HD dual stream)
- Call record
- Network address book
- SNP traversal between the public network and private network
- Intelligent rate control (IRC)
- Super error concealment (SEC)
- LDAP
- API for integration

Approval and Compliance
- CE
- RoHS
- UL
- FCC

Electrical
- Working voltage: 100–240V AC
- Working frequency: 50–60Hz
- Power consumption:
  RP200-46：<300w
  RP200-40：<300w
  RP100-55：<270w
  RP100-46：<200w
  RP100-40：<200w

Environmental Specification
- Operating Temperature: 0-40℃
- Operating Humidity: 20-80%
- Peripheral noise: < 40 dBA SPL
- Recommended illuminance: 450 lux
- Reverberation time: 0.3-0.5s
- Color temperature: 4000k

Physical Characteristics
- Dimensions:
  RP200-46：2170×500×1600
  RP200-40：1900×500×1570
  RP100-55：1270×500×1690
  RP100-46：1080×500×1600
  RP100-40：950×500×1530
- Weight:
  RP200-46：80kg
  RP200-40：70kg
  RP100-55：65kg
  RP100-46：60kg
  RP100-40：55kg

Huawei TP1002

Ultimate HD Telepresence, Immersive Experience and Easy to Use.

In today's fast-paced global economy, business is being made between companies and partners distributed around the world, day and night. It is obvious that he who is acting fast upon the market demand will win the game.

Huawei TP1002 brings people together in a best ever virtual meeting experience, immediately and enjoyable. Synergy between people creates value, reduce cost and help you stay ahead of competition.

Immersive Experience With HD Video and Directional Sound

Huawei Telepresence TP1002 offers a real-life telepresence experience. We have combined the best of video, audio and collaboration technologies. TP1002 has immersive HD video, HD audio and HD content quality.

Ease of Use: Integrated System Control via Touch Screen

Easy of use is a long time obstacle for videoconference industry and people hate that complicated and dull remote control. With a re-designed innovative trendy, neat and well organized touch screen GUI, Huawei TP1002 is standing out of competition.

Affordable, Cost-effective Solution

IP technology is evolving, but there are always times that the live video quality is undermined due to QoS issues. With Huawei SEC (super error concealment) and IRC (intelligent rate control) technology, Huawei TP1002 is able to keep producing good video quality even if there are significant packet loss or low bandwidth, latency and jitter over the network link.

Standard-based, Highly Interoperable

Huawei develops standard-based telepresence system , make sure it's highly interoperable with mainstream telepresence equipments, including telepresence based on TIP.

Worrying about security of your videoconference call? Huawei TP1002 adopts standard-based H.235 and AES encryption techniques to ensure that your videoconference call is well protected from malicious hacking and sniffing. The device configuration and setup is locked by admin password to avoid any misplay.

Huawei TP1002 Key Features	
Video Quality	High Definition Standard-based 1920x1080 – 50/60fps 1280x720-60fps
Content Quality	SXGA: 1280x1024
HD Monitors	
HD Cameras Pan-Tilt-Zoom(PTZ)	
HD Audio	

Huawei TP1002 Specifications

System Components
- Huawei VP9039A-T codec
- Telepresence Camera TC101
- HiFi Microphone
- Telepresence Intelligence Control software
- 8.4"Color Touchscreen
- Power supplies
- Accessory kit

Telecom Standards & Protocols
- ITU-T H.323/H.320, IETF SIP

Video Standards & Protocols
- H.264, H.263, H.263+, H.261
- 1080p(50/60fps), 1080p(25/30fps), 720p (50/60fps), 720p(25/30fps), 4CIF, CIF

- Bandwidth Requirements

Frame	Minimum	Recommended
720p 30fps	768Kbps	1.5Mbps
720p 60fps	1Mbps	2Mbps
1080p 30fps	1Mbps	2Mbps
1080p 60fps	2Mbps	4Mbps

Content Video Resolution
- H.239
- SXGA (1280x1024),XGA (1024x768), SVGA(800x600), VGA (640x480)
- Support for multiple dual Live stream mode:
  -1080p(25/30fps) and 1080p(25/30fps)
  -720p(50/60fps) and 720p(50/60fps)
  -720p(25/30fps) and 720p(25/30fps)

Audio Standards & Protocols
- AAC-LD,G.722, G.711, G.728
- HWA-LD : Huawei broadband audio Low Delay
- Acoustic Echo Cancellation (AEC)
- Acoustic Noise Suppression (ANS) 12 dB
- Automatic Gain Control (AGC)±6 dB
- VoiceClear
- AudioEnhancer

Other ITU-Supported 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

User Interface
- Languages: English, French, Spanish, Portuguese, Russian, German, Chinese
- Control mode: Touchscreen, Remote control, Telnet, Web

Security
- H.235 signaling and media stream encryption
- AES media stream encryption
- Conference access password
- Conference control password
- Administrator password
- H.323 ID and number binding
- IP address and number binding

Special Features
- Hybrid with IMS Network
- Active caption
- Group function
- SiteCall (HD dual stream)
- Call record
- Network address book
- Intelligent rate control (IRC)
- Super error concealment (SEC)

Maintenance Management
- Local and remote loopback
- Test signals: providing test sound and standard test stripes
- Volume input indication
- IP network test
- Telnet: command line mode; providing user-level and administrator-level login accounts
- Local and remote software upgrades
- Embedded Web server, GUI interface
- Indication for network package loss
- Event log record
- Default settings restoration

Approval and Compliance
- CE
- RoHS

Electrical
- Working voltage: 100-240V AC
- Working frequency: 50-60Hz
- Power consumption: <1.2kw

Environmental Specification
- Operating Temperature: 0℃-40℃
- Operating Humidity: 10-90%
- Non-Operating Temperature: -40℃-70℃
- Peripheral noise: < 40 dBA SPL
- Recommended illuminance: > 300 lux

Physical Characteristics
- Dimensions(LxWxH):1780mmx730mmx1700mm
- Weight: 240 kg

HUAWEI

Huawei VP9050

Executive Desktop HD Videoconference Endpoint

The VP9050 is a high-end desktop High Definition videoconferencing endpoint with 4-site embedded MCU. It is integrated with the Full HD(1080p) digital camera, high-fidelity (Hi-Fi) sound box, HD micro-phone and 21.5-inch widescreen LCD via Touch Screen. With an elegant and sleek design, it will surely provide you unprec-edented audiovisual experience.

Superb HD Video, Audio quality and Content sharing experience

Superb Video Quality

HUAWEI VP9050 uses Huawei proprietary technologies, such as VideoIntensifier and ViewProcessing. In addition to the latest H.263 and H.264 coding and decoding technology, the VP9050 supports H.264 1080p HD video format and 64Kbps~4Mbps conference access rate and provides the high-quality video effect.

Superior Audio Effect

Embedded with 2 microphones and stereo sound box, and by using the AAC-LD broad band audio, the VP9050 provides you hi-fi (high fidelity) stereo audio. The VP9050 adopts the most advanced technologies, such as acoustic echo cancellation (AEC), automatic gain control (AGC), acoustic noise suppression (ANS), and provides clearer full duplex digital audio effect.

High Definition Content Sharing

The VP9050 supports the standard H.239 protocol, so that it can transmit two separated channels of video bit streams. By using the intelligent dual stream technology, the bandwidth of the main stream and the auxiliary stream can be adjusted automatically. Thus, the video and conference contents can be sent and received at the same time, such as PPT, WORD, Flash, Living videos, etc, which makes collaboration works more convenient and economical.

Elegant Design, Easy operation and multitask function

Huawei VP9050 is visually appealing. Elegant design and fuscous motifs, which provides the high-end a steady-going but refined, friendly and stylish appearance, also vivid hi-tech style. You will love it.

Easy of use is a long time obstacle for videoconference industry and people hate that complicated and dull remote control. With a redesigned innovative remote, trendy, neat and well organized touch screen GUI, Huawei VP9050 is standing out of competition.

The VP9050 can be used as Videoconferencing Endpoint and PC display meantime. It provides multiple display modes, such as full screen, picture-in-picture, picture-outside-picture. In addition, it supports multiple display modes of 16:9 and 4:3. the VP9050 can automatically adapt to the display device according to the video resolution to meet your different kinds of requirements.

QoS and Secure videoconferencing

IP technology is evolving, but there are always times that the live video quality is undermined due to QoS issues. With Huawei SEC (super error concealment) and IRC (intelligent rate control) technology, Huawei VP9050 is able to keep producing good video quality even if there are significant packet loss, latency and jitter over the network link.

Worrying about security of your videoconference call? Huawei VP9050 adopts standard-based H.235 and AES encryption techniques to ensure that your videoconference call is well protected from malicious hacking and sniffing. The device configuration and setup is locked by admin password to avoid any misplay.

VP9050 Specification

Models
• VP9050

Embedded MCU
• up to 4 HD 720P video endpoints + 3 voice terminals to join the conference.
• The embedded MCU supports CP, voice activation, camera control, and chairman token.
• two lever cascading
• Mixed H.323 and SIP

Video Standard & Protocols
• H.264, H.263, H.263+, H.261
• ITU-T H.239
• VME (Video Motion Enhancement)

People Video Resolution
• 1080p(optional), 720p, 4CIF/4SIF
• 1080p 30fps(optional), 720p 50/60fps (optional), 720p 30fps
• 512kbps for 720p 30fps
• 768kbp for720p 50/60fps
• 1Mbps for 1080p 30fps
• VideoIntensifier
• ViewProcessing

Camera
• Embedded High Quality CMOS Camera
• Video Capture Resolution: 1080p
• Automatic Exposure(AE), Automatic White Balance (AWB)
• Manual Picture Parameters Control
• Rotatable
• Private Protection Switch

Display
• 21.5 Inch 16:9 LCD
• Resolution: 1080p
• Luminance: >200cd/m2
• Response Time: <5ms
• View Angle:
  -Horizontal: 70 degree
  -Vertical: 65 degree
• Contrast: 700
• Luminance, Contrast Control, Rotatable
• Support External Source Input

Sound System
• 2xEmbedded Mics, Support External Mics
• 2xEmbedded Stereo Loudspeakers

Content Video Resolution
• SXGA(1280x1024) , XGA(1024x768)
• SVGA(800x600) , VGA(640x480)

Audio Standard & Protocols
• AAC-LD Stereo, G.722, G.711, G.728
• 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
• VoiceClear
• AudioEnhancer
• Audio-Lip Synchronization

Other ITU-Supported 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
• Communication Standards: ITU-T H.323, IETF SIP
• Network Standards: TCP/IP, FTP, DHCP, SNMP, Telnet, HTTP , HTTPS, PPPoE, RTP, RTCP
• Interface:
  -1-port IP, 10/100 Base-T, 2xRJ45 connectors
  -1-port wireless (WCDMA, CDMA2000 EV-DO), USB connectors
• Bandwidth
  -IP: 64kbps~4Mbps
  -IP: Total 8Mbps (available: Supports up to 4 HD video endpoints + 3 voice terminals to join the conference)

Interface
• Audio Input Interfaces
  -1x3.5mm line in jack
  -1x3.5mm mic jack
• Audio Output Interfaces
  -1x3.5mm earphone jack
  -1x3.5mm line out jack
• Video Input Interface
  -1xDVI / YPbPr / VGA
Video Output Interface
  -1xDVI / YPbPr / VGA
• 1xUSB ports

Security
• H.235 signaling and media stream encryption
• AES media stream encryption
• Conference access password
• Conference control password
• Administrator password
• H.323 ID and number binding
• IP address and number binding

Language
• Simplified Chinese, Traditional Chinese, English, German, Spanish, French, Norwegian, Italian, Polish, Russian, Portuguese, Hungarian, Finnish, Romanian, Czechic, Swedish, Arabic, Turkish, Greek

Special Features
• Screen Touch and Remote Control
• Hybrid with IMS Network
• Site Call
• Domain Name/Email Registration & Call
• Content Locking
• Web Image Monitor, 1080p(optional) / 720p Picture Capture
• Automatic Adjustment for Active Content and Picture
• HD Desktop Display/Active Image
• 16:9 and 4:3 Automatic Adaption
• Picture-in-picture, Bi-screen and tri-screen split display
• Function Icon, Power On Picture/ Music, Remote Control
• Group Function/Address book Import and Export, LDAP, Network Address book
• API for integration
• Intelligent rate control (IRC)
• Super error concealment (SEC)

• Loss Packet Retransmission
• SNP/H.460/Static NAT traversal between the public network and private network

Digital Caption
• Active Caption, Automatic Adjustment
• What-you-see-is-what-you-get (WYSIWYG) caption editing
• Caption rolling mode setting
• Modifiable and optional front , background color and Alpha
• 16 optional colors
• Support T.140 Protocol

Maintenance Management
• Web Management
  -Embedded Web server, Support IE 6.0 / 7.0 / FireFox 2.x
  -Multi-user Access Control
  -Address Book Management
  -Terminal Network Management
  -Calling Record
  -Fault Diagnosis
• Terminal Network Management: SNMP
• Telnet: command line mode; providing user level and administrator-level login accounts
• Remote Control: GUI interface
• Local and remote loopback
• Test signals: providing test sound and standard test stripes
• Local and remote software upgrades
• IP Network Diagnosis: PING, Packet Loss, Delay, Jitter / Fire Wall Ports Detection
• Volume Input Indication
• Network Packet Loss Indication
• Event Log Record
• Configuration Import / Export
• Factory Default Setting Restoring
• Automatic Sleep Mode
• Power/Working Indicating LED

Electrical
• Working voltage: 100-240V AC
• Working frequency: 50-60Hz
• Power consumption: 100W

Environmental Specification
• Operating Temperature: 0-40°C
• Operating Humidity: 10-80% Non-Operating Temperature: -40°-85°C
• Non-Operating Humidity (Non-condensing): 0-95%
• Peripheral noise: < 46 dBA SPL
• Lowest illuminance: 15 lux
• Recommended illuminance: > 300 lux
• Physical Characteristics
• CodecDimensions(LxWxH): 542mmx114mmx490mm
• Package Dimensions(LxWxH): 685mmx269mmx685mm
• Weight: 8.2 kg

HUAWEI

Huawei VP9035A-720

Excellent HD video communications with 4-site embedded MCU, easy-to-use like never before.

Huawei VP9035A-720 is bringing multi-site, excellent HD video communication and content sharing experience to your conference room in an affordable and simple way.

In today's fast-paced global economy, business is being made between companies and partners distributed around the world, day and night. It is obvious that he who is acting fast upon the market demand will win the game.

Huawei VP9035A-720 brings people together in HD virtual meeting experience, immediately and enjoyable. Synergy between people creates value, reduce cost and help you stay ahead of competition.

Easy of use is a long time obstacle for videoconference industry and people hate that complicated and dull remote control. With a re-designed innovative remote, trendy, neat and well organized GUI, Huawei VP9035A-720 is standing out of competition. You will love it.

HD video is nice, but sound effect is more essential during a conference call. By employing AAC-LD, HWA-LD and other standard-based wide band audio technology, Huawei VP9035A-720 can deliver best of the breed sound experience to make people feel being there.

IP technology is evolving, but there are always times that the live video quality is undermined due to QoS issues. With Huawei SEC (super error concealment) and IRC (intelligent rate control) technology, Huawei VP9035A-720 is able to keep producing good video quality even if there are significant packet loss, latency and jitter over the network link.

Worrying about security of your videoconference call? Huawei VP9035A-720 adopts standard-based H.235 and AES encryption techniques to ensure that your videoconference call is well protected from malicious hacking and sniffing. The device configuration and setup is locked by admin password to avoid any misplay.

To facilitate system integration, Huawei VP9035A-720 is rack-mountable and equipped with multiple video and audio connections, making it an ideal choice for system integrators.

Huawei VP9035A-720 Key Features

Video Quality	High Definition Standard-based 1280x720 -30fps
Content Quality	SXGA: 1280x1024
HD Monitors	
HD Cameras Pan-Tilt-Zoom (PTZ)	
HD Audio	
External Audio, Video Input/Output	Audio: 5 in,4 out Video: 3 in,3 out
Point-to-Point HD video Communications	P-P

VP9035A-720 Specifications

Models
- VP9035A-720

Embedded MCU
- up to 4 HD 720P video endpoints + 3 voice terminals to join the conference.
- The embedded MCU supports CP, voice activation, camera control, and chairman token.
- two lever cascading
- Mixed H.323 and SIP

Video Standards & Protocols
- H.264, H.263, H.263+, H.261
- H.239
- VME(Video Motion Enhancement)

People Video Resolution
- 720p, 4CIF,CIF
- 720p (30 fps)
- 512kbps for 720p 30fps
- VideoIntensifier
- ViewProcessing

Content Video Resolution
- SXGA (1280x1024),XGA (1024x768), SVGA (800x600), VGA (640x480)

Audio Standards & Protocols
- AAC-LD Stereo, G.722, G.711, G.728
- 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
- VoiceClear
- AudioEnhancer

Other ITU-Supported 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
- Communication standards: ITU-T H.323/H.320, IETF SIP
- Network standards: TCP/IP,FTP,DHCP, SNMP, Telnet, HTTP, PPPoE, RTP, RTCP
- Interface
  -2-port IP, 10/100 Base-T, RJ45 connectors
  -1-port E1 (H.320), RJ45 connectors
  -4-port 4E1 (G.703,G.704),RJ45 connectors
  -2-port wireless (WCDMA, CDMA2000 EV-DO), USB connectors
- Bandwidth
  -IP : 64 Kbps~4 Mbps

-IP : Total 8Mbps (available: Supports up to 4 HD video endpoints + 3 voice terminals to join the conference)
  -E1: 64 Kbps~2 Mbps
  -4E1: 64 Kbps~4 Mbps

Interfaces
- Camera control interface: 2xRS232/422
- Video Input Interfaces
  -1xS-video/CVBS
  -2xDVI/YPrPb/VGA
- Video Output Interfaces
  -1xS-video/CVBS
  -2xDVI/YPrPb/VGA
- Audio Input Interfaces
  -2xXLR (Connects to analog microphone)
  -2xRCA (Connects to tuning console or VCR)
  -1xRJ45 (Connects to microphone array)
- Audio Output Interfaces
  -2xRCA (Stereo audio output: Connects to video recorder)
  -2xRCA(Connects to the audio input interface on TV set)

User Interface
- Languages: Simplified Chinese, Traditional Chinese, English, German, Spanish, French, Norwegian, Italian, Polish, Russian, Portuguese, Hungarian, Finnish, Romanian, Czechic, Swedish, Arabic, Turkish, Greek
- Control mode: Remote control, Telnet, Web

Security
- H.235 signaling and media stream encryption
- AES media stream encryption
- Conference access password
- Conference control password
- Administrator password
- H.323 ID and number binding
- IP address and number binding

Digital Caption
- Caption banner, body text and information bar
- Rolling display mode of the speech draft
- What-you-see-is-what-you-get (WYSIWYG) caption editing
- 32 bits true-color palette
- Modifiable and optional front background color
- Modifiable caption size and transparency
- Caption rolling mode setting
- Site name display and position shift
- Text input by using the remote control

External character generator
- Powerful caption SMS function enhances the communications among sites and facilitates your use.

Special Features
- Hybrid with IMS Network
- Power-on picture
- Picture-in-picture: 1/16 picture size, optional position
- 16:9 and 4:3 mixed display
- Split output: Bi-screen and tri-screen display
- Active caption
- Group function
- SiteCall (HD dual stream)
- Call record
- Network address book
- SNP traversal between the public network and private network
- Intelligent rate control (IRC)
- Super error concealment (SEC)
- LDAP
- API for integration

Maintenance Management
- Local and remote loopback
- Test signals: providing test sound and standard test stripes
- Volume input indication
- IP network test
- Telnet: command line mode; providing user-level and administrator-level login accounts
- Local and remote software upgrades
- WebServer, Web maintenance management
- Event log record
- Default settings restoration

Approval and Compliance
- CE
- RoHS
- UL
- FCC

Electrical
- Working voltage: 100-240V AC
- Working frequency: 50-60Hz
- Power consumption: 100W

Environmental Specification
- Operating Temperature: 0-40°C
- Operating Humidity: 10-80%
- Non-Operating Temperature: -40°-85°C
- Non-Operating Humidity (Non-condensing): 0-95%
- Peripheral noise: < 46 dBA SPL
- Lowest illuminance: 15 lux
- Recommended illuminance: > 300 lux

Physical Characteristics
- Codec Dimensions(LxWxH):422mmx225 mmx60.5mm
- Package Dimensions(LxWxH):485mmx278mmx178mm
- Weight: 4 kg

#	Description	#	Description	#	Description
1	Interface board slot	7	HD output 1 (DVI/SXGA/YPbPr)	13	Ethernet port 1 & 2
2	Audio output Aux	8	HD input 2 (DVI/SXGA/YPbPr)	14	Lan-PoE MIC array
3	Audio output main	9	HD input 1 (DVI/SXGA/YPbPr)	15	Update switch
4	Audio input RCA	10	USB	16	Power input
5	Balanced audio input	11	SD input & output (S-ideo/CVBS)	17	Power switch
6	HD output 2 (DVI/SXGA/YPbPr)	12	Serial RS-232/RS-422		

HUAWEI

Huawei VP9030-1080

Excellent HD video communications with 4-site embedded MCU,
at an affordable cost.

Huawei VP9030-1080 is bringing multi-site, excellent HD video communication and content sharing experience to your conference room in an affordable and simple way.

In today's fast-paced global economy, business is being made between companies and partners distributed around the world, day and night. It is obvious that he who is acting fast upon the market demand will win the game.

Huawei VP9030-1080 brings people together in HD virtual meeting experience, immediately and enjoyable. Synergy between people creates value, reduce cost and help you stay ahead of competition.

Easy of use is a long time obstacle for videoconference industry and people hate that complicated and dull remote control. With a re-designed innovative remote, trendy, neat and well organized GUI, Huawei VP9030-1080 is standing out of competition. You will love it.

HD video is nice, but sound effect is more essential during a conference call. By employing AAC-LD, HWA-LD and other standard-based wide band audio technology, Huawei VP9030-1080 can deliver best of the breed sound experience to make people feel being there.

IP technology is evolving, but there are always times that the live video quality is undermined due to QoS issues. With Huawei SEC (super error concealment) and IRC (intelligent rate control) technology, Huawei VP9030-1080 is able to keep producing good video quality even if there are significant packet loss, latency and jitter over the network link.

Worrying about security of your videoconference call? Huawei VP9030-1080 adopts standard-based H.235 and AES encryption techniques to ensure that your videoconference call is well protected from malicious hacking and sniffing. The device configuration and setup is locked by admin password to avoid any misplay.

To facilitate system integration, Huawei VP9030-1080 is rack-mountable and equipped with multiple video and audio connections, making it an ideal choice for system integrators.

Huawei VP9030-1080 Key Features

Video Quality	High Definition Standard-based 1920x1080-30fps 1280x720-60fps
Content Quality	SXGA: 1280x1024
HD Monitors	
HD Cameras Pan-Tilt-Zoom (PTZ)	
HD Audio	
External Audio, Video Input/Output	Audio: 4 in,4 out Video: 2 in,2 out
Point-to-Point HD video Communications	P-P

VP9030-1080 Specifications

Models
• VP9030-1080

Embedded MCU
• up to 4 HD 720P video endpoints + 3 voice terminals to join the conference.
• The embedded MCU supports CP, voice activation, camera control, and chairman token.
• two lever cascading
• Mixed H.323 and SIP

Video Standards & Protocols
• H.264, H.263, H.263+, H.261
• H.239
• VME(Video Motion Enhancement)

People Video Resolution
• 1080p, 1080i, 720p, 4CIF, CIF
• 1080p(30fps),1080i(50/60fps),720p (50/60fps), 720p(30fps)
• 1Mbps for 1080p 30fps
• 768kbps for 720p 50/60fps
• 512kbps for 720p 30fps
• VideoIntensifier
• ViewProcessing

Content Video Resolution
• SXGA (1280×1024), XGA (1024×768), SVGA (800×600), VGA (640×480)

Audio Standards & Protocols
• AAC-LD Stereo, G.722, G.711, G.728
• 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
• VoiceClear
• AudioEnhancer

Other ITU-Supported 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
• Communication standards: ITU-T H.323/H. 320, IETF SIP
• Network standards: TCP/IP,FTP, DHCP, SNMP, Telnet, HTTP, PPPoE, RTP, RTCP
• Interface
  -2-port IP,10/100 Base-T,RJ45 connectors
  -1-port E1 (H.320), RJ45 connectors
  -4-port 4E1(G.703,G.704),RJ45 connectors
  -2-port wireless(WCDMA,CDMA2000 EV-DO), USB connectors
• Bandwidth
  -IP : 64 Kbps~4 Mbps

-IP : Total 8Mbps (available: Supports up to 4 HD video endpoints + 3 voice terminals to join the conference)
  -E1: 64 Kbps~2 Mbps
  -4E1: 64 Kbps~4 Mbps

Interfaces
• Camera control interface: 2×RS232/422
• Video Input Interfaces
  -2×DVI/YPrPb/VGA
• Video Output Interfaces
  -2×DVI/YPrPb/VGA
• Audio Input Interfaces
  -1×XLR (Connects to analog microphone)
  -2×RCA (Stereo, connects to tuning console or VCR)
  -1×RJ45 (Stereo, connects to microphone array)
• Audio Output Interfaces
  -2×RCA (Stereo, connects to video recorder)
  -2×RCA (Stereo, connects to the audio input interface on TV set)

User Interface
• Languages: Simplified Chinese, Traditional Chinese, English, German, Spanish, French, Norwegian, Italian, Polish, Russian, Portuguese, Hungarian, Finnish, Romanian, Czechic, Swedish, Arabic, Turkish, Greek
• Control mode: Remote control, Telnet, Web

Security
• H.235 signaling and media stream encryption
• AES media stream encryption
• Conference access password
• Conference control password
• Administrator password
• H.323 ID and number binding
• IP address and number binding

Digital Caption
• Caption banner, body text and information bar
• Rolling display mode of the speech draft
• What-you-see-is-what-you-get (WYSIWYG) caption editing
• 16 optional colors
• Modifiable and optional front background color
• Modifiable caption size and transparency
• Caption rolling mode setting
• Site name display and position shift
• Text input by using the remote control

• External character generator
• Powerful caption SMS function enhances the communications among sites and facilitates your use.

Special Features
• Hybrid with IMS Network
• Power-on picture
• Picture-in-picture: 1/16 picture size, optional position
• 16:9 and 4:3 mixed display
• Split output: Bi-screen and tri-screen display
• Active caption
• Group function
• SiteCall (HD dual stream)
• Call record
• Network address book
• SNP traversal between the public network and private network
• Intelligent rate control (IRC)
• Super error concealment (SEC)
• LDAP
• API for integration

Maintenance Management
• Local and remote loopback
• Test signals: providing test sound and standard test stripes
• Volume input indication
• IP network test
• Telnet: command line mode; providing user-level and administrator-level login accounts
• Local and remote software upgrades
• Embedded Web server, GUI interface
• Indication for network package loss
• Event log record
• Default settings restoration

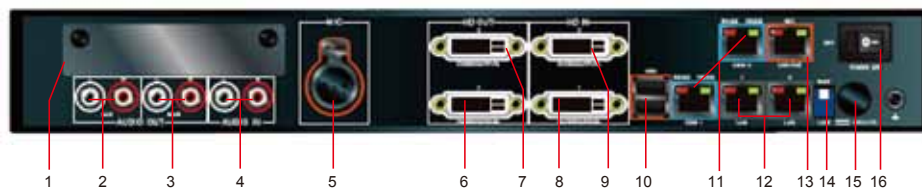## Approval and Compliance
• CE
• RoHS

Electrical
• Working voltage: 100-240V AC
• Working frequency: 50-60Hz
• Power consumption: 100W

Environmental Specification
• Operating Temperature: 0-40°C
• Operating Humidity: 10-80%
• Non-Operating Temperature: 40°-85°C
• Non-Operating Humidity (Non-condensing): 0-95%
• Peripheral noise: < 46 dBA SPL
• Lowest illuminance: 15 lux
• Recommended illuminance: > 300 lux

Physical Characteristics
• Codec Dimensions(L×W×H):422mm×225mm×60.5mm
• Package Dimensions(L×W×H):485mm×278mm×178mm
• Weight: 4 kg

1	Interface board slot	7	HD input 2 (DVI/SXGA/YPbPr)	13	Lan-PoE MIC array
2	Audio output Aux	8	HD input 1 (DVI/SXGA/YPbPr)	14	Update switch
3	Audio output main	9	HD input 2 (DVI/SXGA/YPbPr)	15	Power input
4	Audio input RCA	10	USB	16	Power Switch
5	Balanced audio input	11	Serial RS-232/RS-422		
6	HD output 1 (DVI/SXGA/YPbPr)	12	Ethernet port 1 & 2		

HUAWEI

Huawei VP9030-720

Excellent HD video communications with 4-site embedded MCU, at an affordable cost.

Huawei VP9030-720 is bringing multi-site, excellent HD video communication and content sharing experience to your conference room in an affordable and simple way.

In today's fast-paced global economy, business is being made between companies and partners distributed around the world, day and night. It is obvious that he who is acting fast upon the market demand will win the game.

Huawei VP9030-720 brings people together in HD virtual meeting experience, immediately and enjoyable. Synergy between people creates value, reduce cost and help you stay ahead of competition.

Easy of use is a long time obstacle for videoconference industry and people hate that complicated and dull remote control. With a re-designed innovative remote, trendy, neat and well organized GUI, Huawei VP9030-720 is standing out of competition. You will love it.

HD video is nice, but sound effect is more essential during a conference call. By employing AAC-LD, HWA-LD and other standard-based wide band audio technology, Huawei VP9030-720 can deliver best of the breed sound experience to make people feel being there.

IP technology is evolving, but there are always times that the live video quality is undermined due to QoS issues. With Huawei SEC (super error concealment) and IRC (intelligent rate control) technology, Huawei VP9030-720 is able to keep producing good video quality even if there are significant packet loss, latency and jitter over the network link.

Worrying about security of your videoconference call? Huawei VP9030-720 adopts standard-based H.235 and AES encryption techniques to ensure that your videoconference call is well protected from malicious hacking and sniffing. The device configuration and setup is locked by admin password to avoid any misplay.

To facilitate system integration, Huawei VP9030-720 is rack-mountable and equipped with multiple video and audio connections, making it an ideal choice for system integrators.

Huawei VP9030-720 Key Features

Video Quality	High Definition Standard-based 1280x720-30fps
Content Quality	SXGA: 1280x1024
HD Monitors	
HD Cameras Pan-Tilt-Zoom (PTZ)	
HD Audio	
External Audio, Video Input/Output	Audio: 4 in,4 out Video: 2 in,2 out
Point-to-Point HD video Communications	P-P

VP9030-720 Specifications

Models
• VP9030-720

Embedded MCU
• up to 4 HD 720P video endpoints + 3 voice terminals to join the conference.
• The embedded MCU supports CP, voice activation, camera control, and chairman token.
• two lever cascading
• Mixed H.323 and SIP

Video Standards & Protocols
• H.264, H.263, H.263+, H.261
• H.239
• VME(Video Motion Enhancement)

People Video Resolution
• 720p, 4CIF, CIF
• 720p (30 fps)
• 512kbps for 720p 30fps
• VideoIntensifier
• ViewProcessing

Content Video Resolution
• SXGA (1280x1024), XGA (1024x768), SVGA (800x600), VGA (640x480)

Audio Standards & Protocols
• AAC-LD Stereo, G.722, G.711, G.728
• 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
• VoiceClear
• AudioEnhancer

Other ITU-Supported 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
• Communication standards: ITU-T H.323/H.320, IETF SIP
• Network standards: TCP/IP,FTP, DHCP, SNMP, Telnet, HTTP, PPPoE, RTP, RTCP
• Interface
-2-port IP,10/100 Base-T,RJ45 connectors
-1-port E1 (H.320), RJ45 connectors
-4-port 4E1 (G.703, G.704), RJ45 connectors
-2-port wireless (WCDMA, CDMA2000 EV-DO), USB connectors
• Bandwidth
-IP : 64 Kbps~4 Mbps
-IP : Total 8Mbps (available: Supports up to 4 HD video endpoints + 3 voice terminals to join the conference)

-E1: 64 Kbps~2 Mbps
-4E1: 64 Kbps~4 Mbps

Interfaces
• Camera control interface: 2×RS232/422
• Video Input Interfaces
-2×DVI/YPrPb/VGA
• Video Output Interfaces
-2×DVI/YPrPb/VGA
• Audio Input Interfaces
-1×XLR (Connects to analog microphone)
-2×RCA (Stereo, connects to tuning console or VCR)
-1×RJ45 (Stereo, connects to microphone array)
• Audio Output Interfaces
-2×RCA (Stereo,connects to video recorder)
-2×RCA (Stereo, connects to the audio input interface on TV set)

User Interface
• Simplified Chinese, Traditional Chinese, English, German, Spanish, French, Norwegian, Italian, Polish, Russian, Portuguese, Hungarian, Finnish, Romanian, Czechic, Swedish, Arabic, Turkish, Greek
• Control mode: Remote control, Telnet, Web

Security
• H.235 signaling and media stream encryption
• AES media stream encryption
• Conference access password
• Conference control password
• Administrator password
• H.323 ID and number binding
• IP address and number binding

Digital Caption
• Caption banner, body text and information bar
• Rolling display mode of the speech draft
• What-you-see-is-what-you-get (WYSIWYG) caption editing
• 16 optional colors
• Modifiable and optional front background color
• Modifiable caption size and transparency
• Caption rolling mode setting
• Site name display and position shift
• Text input by using the remote control
• External character generator
• Powerful caption SMS function enhances the communications among sites and facilitates your use.

Special Features
• Hybrid with IMS Network
• Power-on picture
• Picture-in-picture: 1/16 picture size, optional position
• 16:9 and 4:3 mixed display
• Split output: Bi-screen and tri-screen display
• Active caption
• Group function
• SiteCall (HD dual stream)
• Call record
• Network address book
• SNP traversal between the public network and private network
• Intelligent rate control (IRC)
• Super error concealment (SEC)
• LDAP
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Maintenance Management
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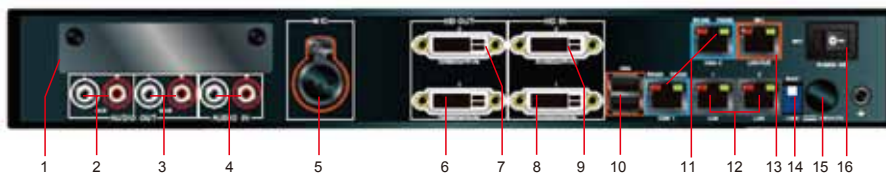• CE
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HUAWEI

Huawei MCU VP9620 Series

Full HD multiparty conferencing, performance and flexibility.

Huawei MCU VP9620 series employ the latest technology to create unified HD videoconferencing experience between all major vendor's endpoints. Embedded, web-based management and GK, universal transcoding, ad-hoc conference call, audio and video IVR...all these great technologies are integrated into an easy-to-expand cabinet.

Design Features

- Based on standard and compatible with all major vendor's endpoints
- The latest chipset and media processing DSP
- Maximum 36 HD ports at 1080p or 720p.
- Start from 12 ports and expandable to 36 ports.
- Maximum 256 registered endpoints
- Tiered permission levels
- 19 inch, 5U, rack mountable

Service Features

- Embedded web-based management and GK
- Ad-hoc conference call
- Audio and video IVR
- Full CP for each conference call
- Personal high definition Continuous Presence
- Network bridge
- Conference special service number
- Super error concealment
- Intelligent rate control
- Context sensitive help

Performance Features

- 720p and 1080p
- AAC-LD
- 4Mbps per port
- Universal transcoding
- SXGA (1280 x 1024) content sharing
- VideoIntensifier™
- ViewProcess™

MCU VP9620 Series

Standard Definition   Standard Definition

MCU VP9620 Series

High Definition

High Definition   High Definition

Do more with less. Huawei MCU VP9620 series helps you reduce cost and improve productivity.

VP9620 Specifications

High Definition Performance
- Up to H.264 1080p 30fps 4Mbps
- Comprehensive HD audio
- Standard H.239 Dual Stream

Video Standards
- H.264 , H.263 , H.263+, H.261

Video Resolution
- Pepole Video Resolution:
  1080p , 720p , 4CIF , 2CIF , CIF , QCIF
- Content Video Resolution :
  -SXGA (1280x1024)
  -XGA (1024x768)
  -SVGA (800x600)
  -VGA (640x480)

Video Frame
- 25fps (PAL) , 30fps (NTSC)
  50fps (PAL) , 60fps (NTSC)

Audio Standards
- AAC-LD/LC, HWA-LD
- G.711, G.722, G.728, G.729A, G.729AB

Protocol
- H.323, SIP, H.235 (AES)
- H.239 (dual video)
- FTP, RTP, HTTP, HTTPS
- RFC2833 DTMF, H.281 FECC

Bandwidth
- IP, 64k-4M

Universal Transcoding
- Combined HD and SD codec within the same conference by the different rates, video resolutions and audio standards.

MCU Feature
- Site Call™: Holding multi-point conference via endpoint
- Ad hoc: Support Ad hoc conference , including via MCU UI , via Dial-In to Meeting Room , via Dial-In to Lobby/Meeting Select , via Dial-In to Lobby/Create Meeting , Blast Dial , Scheduled Via MCU UI
- Schedule conference via WEB
- Administrator and User authorization
- Support Voice Activated Switching
- Support endpoint control via DTMF
- Create or join conference via video/audio IVR
- Personal high definition Continuous Presence
- URI conference call and E-mail notification
- Message overlay
- H.460 network traversal
- Microsoft OCS/Lync interworking
- Soap API for 3rd party conference schedule
- Support video/audio IVR

Embedded WEB Server
- Control MCU and conference via IE browser

Embedded GK
- Registration of MCU , endpoint, Gateway
- Support network address book
- Support pre-define and dynamic registration
- Up to 256 device register

Maintenance
- Support telnet
- Support embedded Web
- Support embedded capture
- Support remote upgrade
- Support resource Statistic
- Support hardware status diagnose
- Support CDR
- Support MCU information export and import

IP QoS
- Adaptability Intelligent rate control (IRC)
- Super error concealment (SEC)
- Auto adaptation enabling
- Priority settings of QoS

Security and Stability Feature
- HTTPS
- AES and H.235
- TLS/SRTP
- Conference password
- Network Interface backup
- Chipset backup

Localization and Customization
- Languages:English,French, German,Spanish, Chinese

Network Interface
- 10/100/1000Base-T , RJ-45

Operating Environment
- Operating temperature: 0 ℃ - 45 ℃
- Relative humidity: 5%-90% Rh
- Air pressure: 70-106KPa

Physical dimensions
- Height: 5U, 19-inch standard chassis
- Weight: <35Kg
- Power: 90-260V AC ±10%, 50/60Hz; 750 W max power
- MTBF: 80000 Hours
- MTTR: 0.5 Hours

Approval and Compliance
- CE
- RoHS
- UL
- WEEE

Model	Capacity
VP9620-12	12x720P 12x1080P
VP9620-24	24x720P 24x1080P
VP9620-36	36x720P 36x1080P

Huawei MCU VP9610 Series

Full HD multiparty conferencing in a compact box.

Huawei MCU VP9610 series employ the latest technology to create unified HD videoconferencing experience between all major vendor's endpoints. Embedded, web-based management and GK, universal transcoding, ad-hoc conference call, audio and video IVR...all these great technologies are integrated into this 1U height cabinet.

Design Feature

• Based on standard and compatible with all major vendor's endpoints
• The latest chipset and media processing DSP
• Embedded OS, avoid attacking from hacker and virus.
• Maximum 12 HD ports at 1080P or 720P
• Maximum 128 registered endpoints
• 19 inch, 1U, rack mountable

Service Features

• Embedded web-based management and GK
• Ad-hoc conference call
• Audio and video IVR
• Full CP for each conference call
• Personal high definition Continuous Presence
• Network bridge
• Conference special service number
• Super error concealment
• Intelligent rate control
• Context sensitive help

Performance Features

• 720p and 1080p
• AAC-LD
• 4Mbps per port
• Universal transcoding
• SXGA (1280x1024) content sharing
• VideoIntensifier™
• ViewProcess™

MCU VP9610

High Definition   High Definition

MCU VP9610

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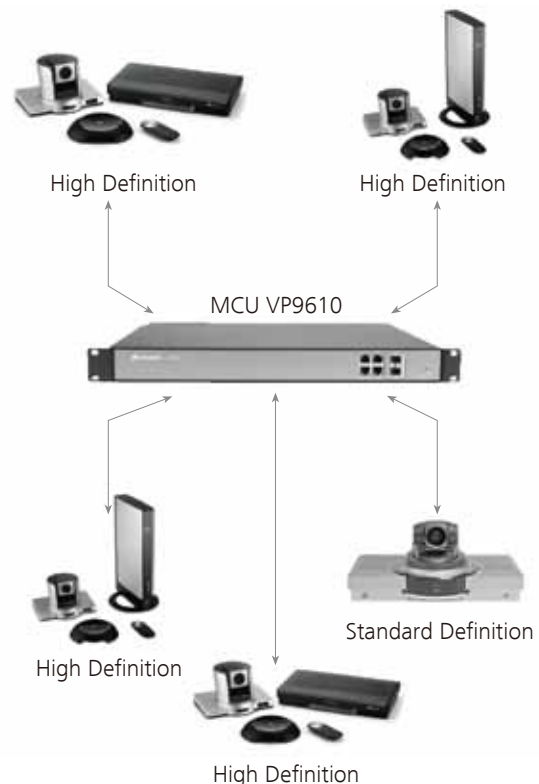
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Approval and Compliance
- CE
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- WEEE

Model	Capacity
VP9610	12x1080P 12x720P

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