Huawei Cloud Meeting

Service Overview

Issue   03

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Contents

1 What Is Huawei Cloud Meeting?

Enjoy a secure HD meeting experience from anywhere, on any platform, with this cloud-device collaboration solution.

All-Scenario Convergence, All-Office Coverage
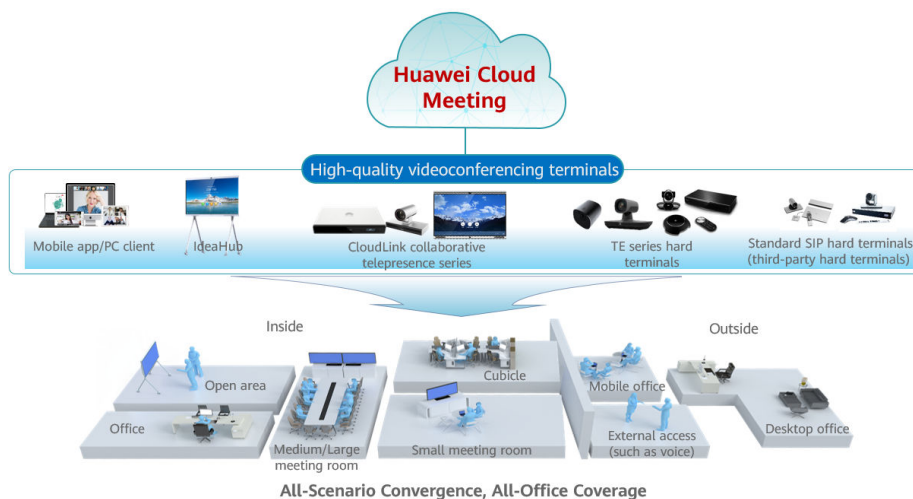
2 Functions

Multiple Terminal Access

You can join meetings using Huawei Cloud Meeting clients and hard terminals as well as third-party hard terminals.

Table 2-1 Multiple terminal access

Terminal Type	Terminal Model
Huawei Cloud Meeting client	PC client and mobile app, running on Windows, macOS, Android, and iOS
Huawei Cloud Meeting hard terminal	• TE series: TE20, TE30, TE40, TE50, and TE60 • CloudLink collaborative telepresence series: CloudLink Box 300, CloudLink Box 600, and CloudLink Bar 300 • IdeaHub
Third-party hard terminal	See **Third-Party Hard Terminals**.

Simplified Meeting Joining

A meeting initiator can send a meeting invitation through email, an online link, or a QR code, and you can join the meeting using different methods.

● Answering an incoming call

If you have logged in to the client, you will receive an incoming call when the meeting starts.

● From the meeting list

If the meeting initiator adds you as a participant when scheduling a meeting, you can join the meeting from the meeting list before the meeting starts.

● Using the meeting ID

You can directly enter the ID and password of a meeting to join the meeting.

- Scanning the QR code

    You can join a meeting by scanning the QR code.

- Using a link

    If you have installed the client, you can join a meeting by clicking or touching the link for a shared meeting.

- Anonymously

    You can join a meeting without using a Huawei Cloud Meeting account. After you download and install the client, you can enter the meeting ID (and password) to join the meeting anonymously.

Annotation and Sharing

You can share data in a meeting. All participants in the meeting can annotate the shared content at the same time.

- Data sharing

    There is desktop sharing, program sharing, and whiteboard sharing. If there are multiple screens, you can select any of them to share. You can share a PowerPoint document, an audio or video file, or other content that is displayed on the desktop. You can also share an interface of a running program.

- Whiteboard annotation

    You and other participants can annotate the shared desktop, whiteboard, or program.

- Remote assistance

    You can remotely connect to a participant's computer to provide support.

Chat

You can chat with other participants in text if the host allows.

Recording

With recording, you can hold a meeting with tens of thousands of participants.

- 1080p HD recording and efficient transcoding
- Video, audio, and presentation recording, no meeting details missing
- Recordings stored online so they can be downloaded anytime, anywhere.

Intelligent Meeting Rooms

Intelligent meeting rooms, professional audio and video, and AI make your meetings smarter.

- Device-cloud collaborative meetings

    Meeting rooms and mobile meetings are perfectly integrated, and internal and external meetings are seamlessly connected. You can use IdeaHubs, mobile phones, and PCs to join meetings and communicate smoothly at any time.

- Professional quality audio and video

  Meeting rooms are powered by proprietary hardware acceleration, H.265 codec, and HD video. Dedicated meeting space is created using AI and intelligent noise reduction where you can define what areas you want sound to be recorded from.

- Wireless projection

  Multiple projection modes and reverse control provide you with a better projection experience.

- Remote collaboration

  You can share your desktop or whiteboard and annotate the shared content with other participants.

- A voice controlled smart assistant provides hands-free operations.

Meeting Control

The Huawei Cloud Meeting Management Platform, PC client, and mobile app provide you with robust meeting control functions.

Table 2-2 describes the meeting control operations available to the host and guests.

Table 2-2 Meeting control operations

Operation	Host	Guest
Muting or unmuting themselves	Supported	Supported
Muting or unmuting all participants	Supported	Not supported
Allowing unmuting	Supported	Not supported
Enabling or disabling the camera	Supported	Supported
Setting audio and video	Supported	Supported
Muting a participant	Supported	Not supported
Disconnecting or removing a participant	Supported	Not supported
Inviting a participant	Supported	Not supported
Sharing the meeting	Supported	Supported
Viewing the participant list	Supported	Supported
Calling other numbers of themselves	Supported	Supported
Calling other numbers of a participant	Supported	Not supported

Operation	Host	Guest
Renaming themselves	Supported	Supported
Starting or pausing recording	Supported	Supported
Setting continuous presence (speaker, gallery, and PiP)	Supported	Supported
Broadcasting a participant	Supported	Not supported
Focusing	Supported	Supported
Raising hands	Not supported	Supported
Relinquishing the host role	Supported	Not supported
Requesting to be host	Not supported	Supported
Transferring the host role	Supported	Not supported
Co-host	Supported	Not supported
Extending the meeting	Supported	Not supported
Locking the meeting	Supported	Not supported
Locking sharing	Supported	Not supported
Ending the meeting	Supported	Not supported
Leaving the meeting	Supported	Supported

Management Platform

The Huawei Cloud Meeting Management Platform supports resource management, service provisioning, and meeting management, so administrators in your enterprise can easily track resource usage.

- Resource management includes:

  Cloud meeting rooms, Huawei professional meeting terminal access accounts, IdeaHub access accounts, third-party meeting terminal access accounts, and recording storage space

- Service provisioning includes:

  Users, hard terminals, cloud meeting rooms, and external contacts

- Meeting management includes:

  Ongoing meetings, upcoming meetings, historical meetings, recording files, and meeting settings

3 Application Scenarios

Enterprise Office

Typical application scenarios

Typical applications include management of daily operations, online consultations, and training for retail and catering enterprises, remote design consulting, new product release, remote technical support from 4S car shop experts, and remote recruitment and job interviews.

Huawei Cloud Meeting meets requirements of enterprises of all sizes. Employees in different areas can join the same meeting using meeting room terminals, PC clients, or mobile apps. They can use the cloud videoconferencing system to build meeting rooms in different countries and regions, or join meetings through various local clients. In this way, they can hold cross-country or cross-region meetings anytime and anywhere, ensuring smooth communication and collaboration and reducing business trip costs.

Advantages

Easy-to-use, HD, stable, efficient, collaborative, secure, and reliable

Telemedicine

Typical application scenarios

Typical applications include remote consultation, video-based medical consultations from primary physicians, and remote surgery demonstration.

Huawei's HD videoconferencing cloud service transmits a live feed from the operating theater to remote classrooms in real time, allowing for increased observation without increasing the risk of infection. Students can also ask questions remotely and discuss key knowledge points with onsite physicians.

Advantages

Ultra-HD video, professional terminals, open APIs and SDKs, and easy integration

Smart Education

Typical application scenarios

Typical applications include home-schooling, remote instruction from famous teachers, university class, high-quality recording of course content, and joint research between schools and enterprises.

Huawei Cloud Meeting provides a training platform that can work with third-party education platforms to provide high-quality course content and live classes. All the students need to access the platform and interact with their teachers and classmates is their PC, tablet, or mobile phone. The education platform also connects to the meeting platform, so teachers can organize seminars, share experience, and listen to and comment on courses being taught by new teachers.

Advantages

Easy access (no special connection is required), multi-terminal coordination, third-party platform integration, and efficient collaboration

Finance

Typical application scenarios

Typical applications include seminars on new products of fund, futures, securities companies, employee training on new businesses, remote financial consulting from experts, and remote lending consulting for small- and medium-sized enterprises and individuals.

Huawei Cloud Meeting enables cross-enterprise and cross-country communication and allows you to join meetings quickly. You do not even need to log in. The industry-leading audio and video processing technology enables 1080p HD video communication with only 1 Mbit/s to 2 Mbit/s of common Internet bandwidth, allowing you to enjoy an HD experience.

Advantages

HD video, low bandwidth, global coverage, support for hybrid cloud deployment, AI support, high security and reliability, and support for many existing terminals

Manufacturing, Transportation, and Construction

Typical application scenarios

Typical applications include daily administrative and operational activities, video dispatch and coordination between the headquarters, branch offices, and subsidiaries, technical guidance from experts, and collaboration on manufacturing and design.

A platform that consists of multi-party 1080p HD video meetings, shared computer screens, data sharing is built. It enables efficient communications between the headquarters, branch offices, and subsidiaries, communications that can be accessed at any time. Huawei's proprietary Video Motion Enhancement (VME) technology provides high-quality video image processing and powerful packet loss concealment capabilities, allowing participants in different places to easily access video meetings and experts to directly view onsite conditions through HD real-time video images and provide guidance.

Advantages

All-scenario coverage and efficient collaboration

Government Agencies

Typical application scenarios

Typical applications include coordination between government agencies, targeted poverty alleviation guidance, tax knowledge popularization and training, and remote judicial assistance.

Huawei Cloud Meeting provides an end-to-end 1080p cloud-based videoconferencing solution to meet the government requirements for cities, counties, towns, and villages. Municipal government agencies can purchase CloudLink BOX series terminals to build medium- and large-sized meeting rooms. Town-level and village-level government agencies can purchase IdeaHubs to build small meeting rooms or join meetings using PC clients. In this way, government agencies at all levels can efficiently communicate with each other.

Advantages

Five-line BGP, easy access (no special connection is required), AI and hybrid cloud support, support for existing terminals, and high security and reliability

4 Technical Specifications

Ultra-Large Meeting Support

Servers are distributed across multiple locations, so there are resources capable of supporting ultra-large meetings.

- Up to 500 video parties and 500 audio parties can join a meeting.
- Meetings can be up to 30 hours long.
- Meetings can be scheduled a full year in advance.

Superb Network Adaptability

No dedicated networks are required. Huawei Cloud Meeting is highly adaptable. It can dynamically adjust the audio and video quality to match the available bandwidth. An HD video experience is ensured even with a packet loss rate as high as 50%.

Other competitors: video at 50% packet loss   Huawei Cloud Meeting: video at 50% packet loss

- Network QoS requirements

QoS Item	QoS Specifications
Delay	150 ms
Jitter	50 ms
Packet loss concealment	50% for video, 80% for voice, 50% for data, 80% for presentation audio, and 20% for presentation video (in the case of non-continuous packet loss)

- Bandwidth requirements: In the video meeting and sharing scenario, each type of terminals requires 4 Mbit/s bandwidth. The following table lists the bandwidth requirements in pure video scenarios.

Terminal Type	Video Resolution	Frames Per Second	Bandwidth
Mobile app	720p (1280 x 720)	20	2 Mbit/s
PC client	720p (1280 x 720)	20	2 Mbit/s
		30	3 Mbit/s
Hard terminal	4CIF (704 x 576)	30	512 kbit/s
	720p (1280 x 720)	30	1 Mbit/s
	1080p (1920 x 1080)	30	2 Mbit/s

- SVC & AVC dual-protocol compatibility

  SVC supports flexible feed layout, and AVC has strong backwards compatibility with existing infrastructure.

Hardware Acceleration, Beautification, and Noise Reduction

- A 720p video codec for the mobile app, iOS software and hardware encoding, but with heating generated power consumption more typical of 360p content.
- GPU acceleration reduces CPU consumption by up to 80%, ensuring smooth video on even low-end devices.
- Video background noise is eliminated to reduce eyestrain, and your appearance can be touched up in real time.

4K Full HD Collaboration

- 4K HD data meetings with dynamic annotations
- Low latency and anti-network loss for remote control

  Mouse delay is less than 200 ms. Data sharing experience is not affected even with a packet loss rate as high as 20%, the latency is reduced to 150 ms, and the jitter is reduced to 50 ms. The mouse shape is synchronized during data sharing.
- A next-generation HD video codec provides a more accurate image and clearer text edges.

5 Security

5.1 Shared Responsibilities

Huawei guarantees that its commitment to cyber security will never be outweighed by the consideration of commercial interests. To cope with emerging cloud security challenges and pervasive cloud security threats and attacks, Huawei Cloud builds a comprehensive cloud service security assurance system for different regions and industries based on Huawei's unique software and hardware advantages, laws, regulations, industry standards, and security ecosystem.

Figure 5-1 illustrates the responsibilities shared by Huawei Cloud and users.

- **Huawei Cloud**: Ensure the security of cloud services and provide secure clouds. Huawei Cloud's security responsibilities include ensuring the security of our IaaS, PaaS, and SaaS services, as well as the physical environments of the Huawei Cloud data centers where our IaaS, PaaS, and SaaS services operate. Huawei Cloud is responsible for not only the security functions and performance of our infrastructure, cloud services, and technologies, but also for the overall cloud O&M security and, in the broader sense, the security and compliance of our infrastructure and services.

- **Tenant**: Use the cloud securely. Tenants of Huawei Cloud are responsible for the secure and effective management of the tenant-customized configurations of cloud services including IaaS, PaaS, and SaaS. This includes but is not limited to virtual networks, the OS of virtual machine hosts and guests, virtual firewalls, API Gateway, advanced security services, all types of cloud services, tenant data, identity accounts, and key management.

Huawei Cloud Security White Paper elaborates on the ideas and measures for building Huawei Cloud security, including cloud security strategies, the shared responsibility model, compliance and privacy, security organizations and personnel, infrastructure security, tenant service and security, engineering security, O&M security, and ecosystem security.

Figure 5-1 Huawei Cloud shared security responsibility model
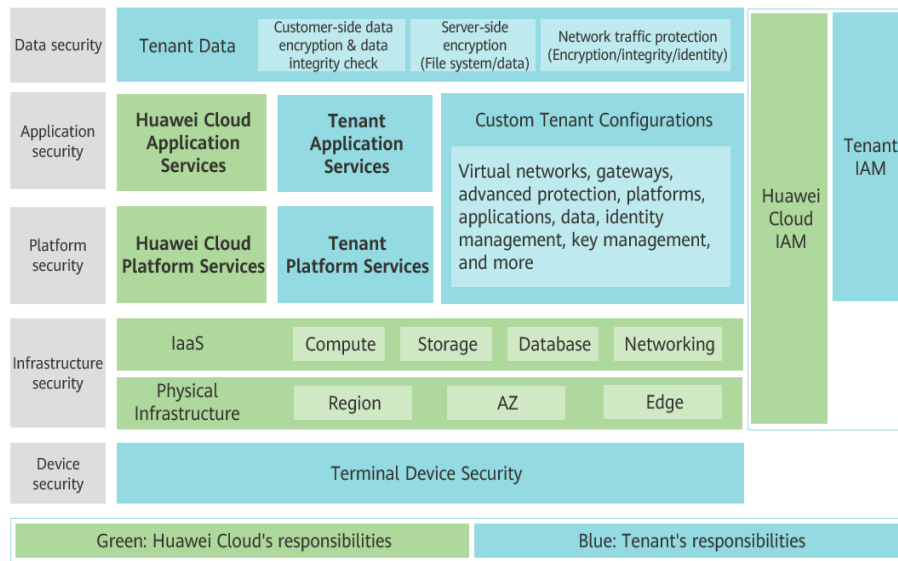
5.2 Identity Authentication and Access Control

Identity Authentication

You can access Huawei Cloud Meeting through the Management Platform, apps, SDKs, APIs, or hard terminals. All these access modes are implemented by sending requests via the REST APIs provided by Huawei Cloud Meeting.

Huawei Cloud Meeting provides password authentication for registered users or registered enterprise users. It also supports meeting credential authentication for uses who anonymously join meetings. The latter applies to meetings that external users can join. For example, you share the meeting link to an external user who has not registered with Huawei Cloud Meeting. When the user clicks the meeting link, the server performs meeting credential authentication. Meetings or message requests are available only to authenticated registered users or registered enterprise users. Huawei Cloud Meeting supports the following authentication methods:

- Users whose accounts are registered by their enterprises use their accounts and passwords for **authentication**.
- Users who register with Huawei Cloud Meeting via enterprise SSO use a code for login-free **authentication**.
- During development API or SDK integration, users register with Huawei Cloud Meeting by requesting an app ID signature. They use the app ID/secret and carry specific information to calculate a signature for **authentication**.

Access Control

Huawei Cloud Meeting controls API access to prevent horizontal and vertical privilege escalation.

1. Management and access using different types of accounts, including:

- Enterprise account (user, organization, and business management in an enterprise)
- Individual account (personal info and meeting management)

2. Different enterprise administrator accounts for administrators to manage the data of their own enterprises. The meeting data of enterprise users is logically isolated. An enterprise administrator can manage only the meeting data of their own enterprise users. They cannot access the meeting data of other enterprise users through API calling.

3. Different roles for enterprise members, including default enterprise administrators, standard administrators, and common users. They have different permissions to call APIs.

5.3 Data Protection

When managing service data risks in your enterprise, you may classify data and protect data of the corresponding level based on the working environment and service scenario. The protection measures include but are not limited to encryption, backup, and integrity verification.

Based on the opinions of enterprises in a wide range of industries and domains and data security governance methods, Huawei Cloud Meeting provides customers with flexible functions of data security management and control.

For details about Huawei Cloud data security governance, see **Huawei Cloud Data Security White Paper**.

Table 5-1 Huawei Cloud Meeting data protection measures

Phase	Measure	Brief Description	Details
Collection	Controllable data collection scope	• Enterprise self-authentication is supported. Passwords are not transmitted to the cloud. • Enterprises can configure only the necessary data and skip optional data. • Enterprises can configure whether to automatically collect error data on apps for end users.	• **How Do I Configure SSO Login for My Enterprise?** • **Managing Users** • **Huawei Cloud Meeting Privacy Statement**
Transmission	Channel encryption for transmission	TLS 1.2 encrypted transmission channel	Protocols such as HTTPS, SIP over TLS, and WSS support TLS 1.2 access.

Phase	Measure	Brief Description	Details
	Data encryption for transmission	Encrypted data transmission using the AES algorithm	SRTP and AES for sharing data streams
Storage	Encrypted data storage	Key data on the cloud can be encrypted for storage.	- User passwords are stored after encryption using PBKDF2. - Email addresses in the corporate directory are stored after encryption using AES. - Cloud recording files are encrypted using AES for storage.
	Controllable data storage	Meeting recordings can be stored locally.	**Controlling a Meeting**
	Data backup and restoration	Enterprise configuration data can be backed up and restored in case of exceptions.	Huawei Cloud Meeting is deployed in a multi-region, multi-AZ, and multi-active architecture. Incremental backup and full backup of enterprise configuration data ensure service availability in extreme cases.
Processing	Data masking	Collected error data is automatically anonymized. Optional data is also anonymized and then uploaded.	You can manually report logs or allow the Huawei Cloud Meeting app to automatically upload logs when it breaks down or experience issues occur. Only app running data is collected. Data such as MAC addresses can be anonymized.
	Sharing watermark	Watermarks can be added on shared screens in meetings to enhance security and trace data leakage source.	**Customizing a Watermark for a Meeting**

Phase	Measure	Brief Description	Details
Exchange	Controllable user experience program	End user experience improvement program is supported. When the program is enabled, users can enjoy higher service efficiency.	**Huawei Cloud Meeting Privacy Statement**
Destruction	Controllable data destruction	Enterprises can delete their configuration data.	**Deleting Users in Batches**
	Regular data deletion	- Enterprises can configure the retention period of historical meeting records. - The system periodically deletes data that is automatically collected.	**Huawei Cloud Meeting Privacy Statement**

5.4 Auditing and Logs

Huawei Cloud Meeting allows you to query resource operation records. You can use these records for audit compliance, resource tracking, and fault locating.

On the **Advanced Settings** > **Operation Logs** page of the Huawei Cloud Meeting Management Platform, you can query the addition, deletion, and modification records of the following objects or operations as an enterprise administrator. For details, see **Viewing Operation Logs**.

Enterprise Administrator
● Recordings ● App IDs ● Presentation streams ● Certificates ● Check item reports ● Activation codes ● OAuth 2.0 authentication info ● Meeting settings ● Enterprise's external contacts ● Administrators ● Apps ● Enterprise brands ● Registration details ● Departments ● Bulletin board materials ● Bulletin board programs ● Bulletin board publications ● Hard terminals ● IdeaHub apps ● Plug-ins ● Cloud meeting rooms ● Tasks ● Privacy file upload ● Meeting users ● Member request review ● Invitation settings ● User invitations ● Session initiation protocols ● Hard terminal information ● Login and logout ● MAC address whitelist ● Dashboard statistics ● Meeting QoS statistics ● Passwords ● Individual's external contacts ● Email addresses ● Privacy statement ● Sensitive words ● O&M monitoring configuration for hard terminals

Enterprise Administrator
● Hard terminal grouping ● Hard terminal groups ● Inspection and collection ● Recording details ● Event subscriptions

You can query or export meeting records over the past year on the **Meetings** > **Meeting History** page of the Huawei Cloud Meeting Management Platform. The records include the meeting topic, scheduler, department, cloud meeting ID, start time, actual duration, number of participants, and meeting details. The meeting details include participant info (name, department, and email address), hard terminal info (name, department, and number), attendance overview (name, department, user number, device type, first time to join the meeting, last time to leave the meeting, number of joining times, and in-meeting duration of participants), and attendance details (name, department, user number, device type, joining time, leaving time, number of joining times, and single in-meeting duration of participants). For details, see **Managing Meetings**.

5.5 Update Management

Huawei Cloud Meeting provides secure application upgrade. When an application is upgraded, the system pushes the new version to you. You can upgrade the application as needed. Before the upgrade, the application automatically verifies the integrity of the new version to ensure security. You can obtain the latest version of the mobile app from your app store. To ensure security, you may be forbidden to log in to Huawei Cloud Meeting if you do not upgrade the application for a long time.

To provide new functions and fix product vulnerabilities in a timely manner, Huawei Cloud Meeting updates SDKs from time to time. For details about how to obtain the latest SDK version and historical release info, see **Downloading the App SDK**.

5.6 Certificates

- ISO 27701 Privacy information management system
- BS 10012 Personal information management system
- ISO 27018 Public cloud personal information protection management system
- ISO 27799 Personal health information security management system
- NIST CSF Cyber security framework assessment system
- CSA STAR Cloud security management system
- ISO 20000 Information technology service management system
- ISO 27001 Information security management system

- ISO 29151 General personal information protection management system

- ISO 27017 Information security management system for cloud services

- ISO 22301 Business continuity management system

- SOC 1 TYPE II

- SOC 2 TYPE I and SOC 2 TYPE II

- SOC 3 Security, confidentiality, and privacy principles

📖 **NOTE**

> You can obtain certificates in the **Trust Center**.

5.7 Security Control Items

Scheduling a Meeting

- Password: You can set a guest password. Guests need to enter the password when joining the meeting.

- Waiting room: You can enable **Waiting room** to filter out external members in the waiting room.

- Restrictions on participants: You can allow only corporate users or invited users to join the meeting.

Quick Settings on the Security Bar at the Bottom in a Meeting

- Locking a meeting: To prevent irrelevant personnel from joining a meeting, you can lock the meeting after all participants join the meeting.

- Waiting room: In the meeting, you can enable **Waiting room** and filter out external members in the waiting room.

- Sharing: If **Share screen** is selected, all participants can initiate sharing.

- Chats: If **Chat** is selected, all participants can chat freely. You can also configure **Public only**, **Host only**, and **Disable chat** in the **Chats** window.

- Local recording: If **Local recording** is selected, all PC client participants can record the meeting. You can grant local recording permissions to a specific participant in the participant list.

- Renaming: If **Rename** is selected, all participants can change their display names in the meeting.

Other Security Settings

- Removing a participant: When a stranger joins a meeting, you can remove the stranger from the meeting and forbid the stranger from joining the meeting again.

- Screen watermarks: To protect the content to be shared, you can log in to the Management Platform as an enterprise administrator and choose **Meetings** > **Meeting Settings** in the navigation pane. On the **Basic Meetings** tab, choose **In Meeting** and enable **Meeting watermark**.

6 Hard Terminal Specifications

IdeaHub S1 Specifications

Table 6-1 IdeaHub S1 specifications

Model	HUAWEI IdeaHub S1/S1 Pro
Screen Size	65-inch or 86-inch
Screen Resolution	4K
Multi-touch	20 points
RAM	12 GB
Flash Memory	64 GB
Functions	Whiteboard, wireless projection, annotation on pages, reverse control, video meeting, hardware audio and video codec, remote bidirectional collaboration, flexible layout for SVC multistream meetings, minutes sending, homepage customization, built-in AppGallery, bulletin board, HiBoard, automatic wakeup by face detection, intelligent camera for optimal meeting view, intelligent voice assistant, speaker tracking (Pro), and acoustic baffle
Components	● Main body: infrared touchscreen, codec, camera, microphone array, and speakers ● Stylus pens ● IdeaShare projector (optional) ● Rolling stand (optional) ● Wall-mounted bracket (optional) ● Built-in Huawei Cloud Meeting. IdeaHub does not support third-party meeting app or Windows modules.
Camera	1080p resolution for IdeaHub S, 4K resolution for IdeaHub Pro, a maximum wide angle of 80°, anti-fog, dust-proof, and anti-flicker

Speakers	Six speakers and stereo audio
Microphones	8 m sound pickup distance, 180° forward sound pickup angle, 12 microphones, echo cancellation, noise suppression, automatic gain control, and external microphones
Dimensions and Weight	- Product dimensions (W x H x D) 65-inch S/Pro: 1492.5 mm x 931.1 mm x 71 mm 86-inch S/Pro: 1963.8 mm x 1195.1 mm x 95 mm - Package dimensions (W x H x D) 65-inch S/Pro: 1720 mm x 1114 mm x 246 mm 86-inch S/Pro: 2090 mm x 1411 mm x 336 mm - Gross weight 65-inch S/Pro: 62 kg 86-inch S/Pro: 110 kg - Net weight 65-inch S/Pro: 50 kg 86-inch S/Pro: 90 kg
Video Input Ports	1 x built-in camera 2 x HDMI
Video Output Ports	1 x embedded LCD 1 x HDMI
Audio Input Ports	1 x built-in microphone array 1 x 3.5 mm LINE IN 1 x HDAI 1 x HDMI (audio input)
Audio Output Ports	1 x built-in speaker 1 x 3.5 mm LINE OUT 1 x HDMI (audio output)
Other Ports	2 x USB 3.0 Type-A 1 x USB 3.0 Type-B 1 x RJ45 (10/100/1000 Mbit/s LAN)
Wi-Fi	2.4 GHz and 5 GHz

Recommended Model for Different Types of Meeting Rooms	- Mini meeting room (< 15 m^2) S/Pro: 65-inch - Small meeting room (15–25 m^2) S/Pro: 65-inch - Medium meeting room (25–50 m^2) S/Pro: 65-inch - Large meeting room (56–100 m^2) S/Pro: 65-inch and 86-inch - Open office area S/Pro: 65-inch and 86-inch - Training classroom (80–100 m^2) S/Pro: 65-inch and 86-inch
Rolling Stand	- Product dimensions (W x H x D) 65-inch S/Pro: 1160.5 mm x 1581 mm x 780 mm 86-inch S/Pro: 1370 mm x 1594 mm x 745 mm - Package dimensions (W x H x D) 65-inch S/Pro: 1730 mm x 840 mm x 280 mm 86-inch S/Pro: 1812 mm x 822 mm x 190 mm - Gross weight 65-inch S/Pro: 34.6 kg 86-inch S/Pro: 32.5 kg - Net weight 65-inch S/Pro: 24.7 kg 86-inch S/Pro: 23.8 kg
Wall-mounted Bracket	- Product dimensions (W x H x D) S/Pro: 1170 mm x 210 mm x 30 mm - Package dimensions (W x H x D) S/Pro: 1270 mm x 300 mm x 86 mm - Gross weight S/Pro: 5.5 kg - Net weight S/Pro: 3.6 kg
IdeaShare Key	- Product dimensions (W x H x D) S/Pro: 117.3 mm x 65 mm x 19.8 mm - Package dimensions (W x H x D) S/Pro: 213 mm x 100 mm x 28 mm - Gross weight S/Pro: 0.196 kg - Net weight S/Pro: 0.08 kg

TE10 or TE20 Specifications

Table 6-2 TE10 or TE20 specifications

Model	TE10	TE20-5X/TE20-5X-NoWIFI/TE20-12X	TE20-5X-WIFI (Cloud)
Recommended Meeting Room Size	Small	Small and medium	Small and medium
Video	720p 30 fps	• 1080p 30 fps • 720p 60 fps	• 1080p 30 fps • 720p 60 fps
Audio	6 m sound pickup distance	6 m sound pickup distance	6 m sound pickup distance
Components	Built-in camera, microphone, speaker, codec, and stand	Built-in camera, microphone, and codec	Built-in camera, microphone, and codec
Video Input Ports	1 x built-in camera	• 1 x built-in camera • 1 x HDMI • 1 x VGA	• 1 x built-in camera • 1 x HDMI • 1 x VGA
Video Output Ports	1 x HDMI	2 x HDMI	2 x HDMI
Audio Input Ports	• 1 x built-in microphone array • Bluetooth	• 1 x HD-AI (microphone array) • 1 x HDMI (audio supported)	• 1 x HD-AI (microphone array) • 1 x HDMI (audio supported)
Audio Output Ports	• 1 x 3.5 mm • 1 x HDMI (audio supported) • 1 x speaker and Bluetooth	• 1 x 3.5 mm • 2 x HDMI (audio supported)	• 1 x 3.5 mm • 2 x HDMI (audio supported)

Other Ports	● 1 x USB 2.0 Host ● IP: 10/100/1000 Mbit/s Base-T, 1 x RJ45 ● Wireless: built-in Wi-Fi	● 1 x USB 2.0 Host ● IP: 10/100/1000 Mbit/s Base-T, 1 x RJ45 ● Wireless: built-in 2.4 GHz/5 GHz dual-band Wi-Fi (supported by TE20 5X and TE20 12X)	● 1 x USB 2.0 Host ● IP: 10/100/1000 Mbit/s Base-T, 1 x RJ45 ● Wireless: built-in 2.4 GHz/5 GHz dual-band Wi-Fi

TEX0 Specifications

Table 6-3 TEX0 specifications

Model	TE30 or TE30-C	TE40 or TE40-C	TE50 or TE50-M-C	TE60
Recommended Meeting Room Size	Small and medium	Small and medium		Large
Video	● TE30: 1080p 30 fps ● TE30-C: 720p 30 fps by default and 1080p 30 fps after the license is imported	● TE40: 1080p 30 fps ● TE40-C: 720p 30 fps by default and 1080p 30 fps after the license is imported	● TE50: 1080p 60 fps ● TE50-M-C: 1080p 30 fps	1080p 60 fps
Audio	6 m sound pickup distance	Provided by external microphones		
Components	Built-in camera, microphone, and codec	External camera, microphone, and codec		

Video Input Ports	• 1 x VGA • 1 x built-in camera	• 1 x HD-VI/DVI • 1 x HDMI/DVI (The HDMI port supports audio input.) • 1 x VGA/YPbPr	• 1 x HD-VI/DVI • 1 x HDMI/DVI (The HDMI port supports audio input.) • 1 x VGA/YPbPr • 1 x 3G-SDI • 1 x CVBS	• 2 x HD-VI/DVI • 1 x HDMI/DVI (The HDMI port supports audio input.) • 2 x DVI-I (HDMI/VGA/YPbPr) • 1 x 3G-SDI • 1 x CVBS/S-Video (multiplexing the DVI-I port)
Video Output Ports	• 1 x VGA/YPbPr • 1 x HDMI	• 2 x HDMI/DVI (HDMI ports support audio output.) • 1 x VGA/YPbPr	• 2 x HDMI/DVI (HDMI ports support audio output.) • 1 x VGA/YPbPr • 1 x 3G-SDI • 1 x CVBS	• 2 x HDMI/DVI (HDMI ports support audio output.) • 2 x DVI-I (HDMI/VGA/YPbPr) • 1 x 3G-SDI • 1 x CVBS/S-Video (multiplexing the DVI-I port)
Audio Input Ports	• 1 x 3.5 mm • 1 x HD-AI (microphone array)	• 1 x XLR • 2 x RCA • 1 x HD-AI microphone array • 1 x HDMI (audio input supported)	• 1 x XLR • 2 x RCA • 1 x 3.5 mm • 1 x HD-AI microphone array • 1 x HDMI (audio input supported)	• 2 x XLR • 2 x RCA • 1 x HD-AI microphone array • 1 x HDMI (audio input supported)

Audio Output Ports	• 1 x 3.5 mm • 1 x HDMI	• 4 x RCA • 2 x HDMI (audio output supported)	• 4 x RCA, 2 x HDMI (audio output supported) • 2 x DVI-I (DVI-I to HDMI, audio output supported)
Other Ports	• IP: 10/100/1000 Mbit/s Base-T, 1 x RJ45 • Wireless: Wi-Fi • USB: 1 x USB 2.0 Host	• IP: 10/100/1000 Mbit/s Base-T, 2 x RJ45 • Wireless: Wi-Fi • PSTN: 1 x RJ11, 2 x RS232 COM port, 2 x USB 2.0 Host	• IP: 10/100/1000 Mbit/s Base-T, 2 x RJ45 • Wireless: Wi-Fi • 4 x E1 (optional): G.703, G.704, 4 x RJ45 • PSTN: 1 x RJ11, 2 x RS232 COM port, 2 x USB 2.0 Host

CloudLink Board Specifications

Table 6-4 CloudLink Board specifications

Model	CloudLink Board 65A or CloudLink Board 65
Recommended Meeting Room Size	Small and medium
Video	4K
Audio	6 m sound pickup distance
Components	Display, codec, speakers, stylus pen, and stand

Video Input Ports	• 1 x built-in camera (5K lens, 1080p 30 fps, 3x lossless zoom) • 1 x HD-VI (4K 30 fps) • 1 x HDMI (4K 30 fps) • 1 x VGA (1080p 60 fps)
Video Output Ports	• 1 x built-in 65-inch LCD (4K 60 fps) • 1 x HDMI (4K 60 fps)
Audio Input Ports	• 12+1 built-in microphone array • 1 x 3.5 mm • 1 x HD-AI • 1 x HDMI (audio input)
Audio Output Ports	• 2 x built-in speakers • 1 x 3.5 mm • 1 x HDMI (audio output)
Other Ports	• 1 x USB 3.0 Type-A • 1 x USB 2.0 Type-B • 1 x 10/100/1000 Mbit/s LAN • 1 x PoE network port • 1 x RJ45 serial port • 1 x Wi-Fi (built-in) • 1 x Bluetooth (built-in)

Intelligent Collaboration Whiteboard Specifications

Table 6-5 Intelligent collaboration whiteboard specifications

Model	Intelligent collaboration whiteboard 65-inch i5, 86-inch i5, 65-inch i7, or 86-inch i7
Recommended Meeting Room Size	Small and medium
Video	4K
Audio	8 m sound pickup distance
Components	Display and speaker

Accessories	● Power cable: 3 m ● Stylus pen x 3 ● Wall-mounted member: WIB9060G x 1 ● Quick start guide x 1 ● Warranty card x 1
Touch-based Writing System	● Recognition principle: infrared recognition ● Number of touch points: 20 ● Minimum stylus size: 3 mm ● Response time: < 15 ms ● Touch precision: ±2 mm (90% or more of the touch area) ● Touchscreen hardness: 7H
PC System	● PC model: MT31 ● PC type: ultra-thin pluggable, Intel Core series modular PC ● CPU: Intel Core ● Configuration: i5, DDR4 8 GB, M.2 SSD 128 GB or i7, DDR4 16 GB, M.2 SSD 256 GB ● GPU: integrated Intel® HD Graphics ● Audio card: integrated high-definition stereo audio card ● Built-in system: Windows 10 enterprise edition
Wi-Fi	● Version: 802.11 a/b/g/n/ac ● Operating frequency: 2.4 GHz, 5 GHz ● Operating distance: 12 m
Input and Output Ports	● HDMI IN x 2 ● USB 2.0 x 3 (two on the front panel) ● USB 3.0 x 1 ● LAN (RJ45) x 1 ● VGA IN x 1 ● AUDIO IN x 1 ● RS232 x 1 ● TOUCH OUT x 1 ● HDMI OUT x 1 ● AUDIO OUT x 1
Video Input Ports	● 1 x built-in camera (8 MP) ● 1 x VGA ● 2 x HDMI
Video Output Ports	● 1 x built-in 65-inch or 86-inch LCD ● 2 x HDMI

Audio Input Ports	• 1 x 3.5 mm • 6 x built-in microphones • 2 x HDMI
Audio Output Ports	• Speaker • 1 x 3.5 mm • 2 x HDMI
Other Ports	• 4 x USB • 1 x network port • 1 x RS232 • 1 x TOUCH output port • 1 x RJ45

CloudLink Camera 200 Specifications

Table 6-6 CloudLink Camera 200 specifications

Model	CloudLink Camera 200
Lens	8.51 MP, 1/2.5-inch CMOS
Video Output Resolution	1080p 50/60 fps, 1080p 25/30 fps, 1080i 50/60 fps, 720p 50/60 fps
Zoom	12x optical zoom
Focal Length	3.85 to 43.06 mm ±5%
Maximum Aperture	F1.8
Maximum Angle of View	Horizontal: 80° Vertical: 50°
Pan and Tilt Angle	Pan: ±100°; tilt: ±30°
Pan and Tilt Speed	Pan: 1.7°/s (tele) to 80°/s (wide). Tilt: 0.7°/s to 28°/s.
Minimum Illumination	1 lux (50 IRE, F1.8)
Number of Presets	254
Video Output Ports	1 x HDMI 1.4b port 1 x USB 3.0 port
Control Ports	2 x RS232 serial ports

For details about hard terminals, visit the following websites:

- **CloudLink Box 310/610**
- **CloudLink Box 300/600**
- **CloudLink Box 200**
- **CloudLink Bar 300**
- **CloudLink Camera 500**
- **CloudLink Camera 200**

7 Third-Party Hard Terminals

Third-party hard terminals can connect to the Huawei Cloud Meeting service to use HD video meetings, maximizing your return on investment.

The third-party hard terminals and their versions supported by the Huawei Cloud Meeting service are as follows:

- Cisco TelePresence SX10 - ce 8.2.1 Final e9daf06 2016-06-28
- Cisco TelePresence SX20 - ce 9.4.0 62bc0aa4505 2018-06-14
- Cisco TelePresence SX80 - TC7.3.6 or later
- Polycom RealPresence Group 550 - Release - 6.2.0-440582
- Polycom HDX 4500 - 3.1.7 or later
- Polycom HDX 6000 - 3.1.7 or later
- Polycom HDX 8000 - 3.1.7 or later
- Polycom HDX 7000 - 3.1.7 or later

8 Recommended Audio Peripherals

The following audio peripherals are recommended for large screens in meeting rooms or other videoconferencing terminals:

- Meeting rooms
    - Logitech CC3500E (medium meeting rooms)
    - Logitech CC4000e (small meeting rooms)
    - Polycom Trio 8800 (medium meeting rooms)
- PCs
    - Logitech C930E camera
    - Logitech C270 camera
    - Logitech C910 camera
    - Logitech C310 camera
    - Logitech C920 camera
    - Logitech C110 camera
    - Logitech C170 camera
    - Plantronics C3225 headset
    - Plantronics C225 headset
    - Edifier K550 headset
    - Jabra Evolve 30 II headset
    - Yealink CP960 and Yealink CP900 speaker/microphone