

An all-in-one 4K audio/video device for capture, codec, processing, recording, on-demand, live streaming, switching, and management. Industrial-grade ARM processor and stable Linux OS ensure reliability. User-centric design with easy installation, operation, and maintenance. Ideal for conferences, training, medical, and more with multi-channel signal handling. Simple, intuitive UI.



IT-RS340

Product Functions and Features

Pure Embedded Design

- 1. High stability and low power consumption with pure embedded system and ARM multicore processor.
- 2. Equipped with a 3.5" removable hard disk tray supporting mainstream high-capacity hard disks and hot-swapping.
- 3. Supports 7x24-hour operation.

Diverse Video Access Methods

- 1. Supports 4 HDMI inputs (up to 3840x2160 resolution, compatible with 1920x1080 and other conventional resolutions).
- 2. Supports RTSP protocol for video access.
- 3. Supports ONVIF protocol for video access.

Diverse Audio-Video Combination Modes

- 1. Supports 4 HDMI audio inputs.
- 2. Supports 4 line-level stereo audio inputs.
- 3. Supports multiple audio-video combination recording modes.

HD Video Recording

- 1. Supports up to 3840x2160@30 resolution for movie channels.
- 2. Supports segmented and timed recording.
- 3. Supports MP4, TS, and other recording formats for convenient playback on various players and software editing.



Multi-protocol Video Live Streaming

- 1. All channels support live streaming via protocols such as RTMP and HLS for easy integration with third-party platforms and systems.
- 2. Supports simultaneous live streaming of movie channels and resource channels.
- 3. Supports scheduled live streaming.

Diverse Management of Video Switching

- 1. Supports 8 layout modes to cater to different scenarios.
- 2. Provides 14 transition effects for smooth and natural video switching.
- 3. Supports subtitles, channel logos, and opening/closing credits with preset options for quick access, enhancing the switching experience.

Efficient Management of Recorded Files

- 1. Supports one-click playback and deletion of recorded files directly from the software interface.
- 2. Supports external storage devices such as USB drives and portable hard disks for oneclick or automatic copying of recorded files.
- 3. Enables transfer of recorded files to relevant platforms via FTP.

Centralized Platform Management

- 1. Allows for remote operations like powering on/off, restarting, and toggling features, reducing workload for staff.
- 2. Provides real-time device status monitoring and course inspection capabilities.
- 3. Offers an open SDK for third-party systems/platforms to integrate centralized management, device status monitoring, and course inspection features.



Technical Specifications

System Units	Operating System	Linux	
	Onboard Storage	3.5-inch pluggable hard drive bays, support for mainstream hard drives; recommended 3.5-inch hard drives with monitoring-grade specifications	
	One Click System Restore	One-click system restore buttons	
	Protocol Support	HTTP, UDP, TCP, HLS, RTMP, RTSP, ONVIF, WEBSOCKET, FTP, NTP, DHCP	
	Front Physical Buttons	Power switch	
Video Unit	Video encoding standard	H.264, H.265	
	Input Resolution	3840×2160p@30, 1920×1080p@60, 1920×1080p@30, 1600×1200P60, 1680×1050p@60, 1600×900P60, 1440×900P60, 1280×1024p@60, 1280×960p@60, 1280×800p@60, 1280×720p@60, 720×480p@60, 640×480p@60	
	Output Resolution	3840×2160p@30, 1920*1080	
	Video Recording Format	MP4, TS	
	Video Recording Bitrate	256kbps~20480Kbps adjustable	
	Recording bitrate control	CBR, VBR, AVBR, QVBR, CVBR, FIXQP, QPMAP	



	Video Recording Frame Rate	25~60fps
	Live Video Format	RTMP, RTSP, HLS
	Live Video Bitrate	256kbps~20480Kbpsadjustable
	Live Video Frame Rate	25~30fps
Audio Unit	Audio Compression Standards	AAC
	Audio Compression Bit Rate	32~192Kbps adjustable
Function	Video Input	4 HDMI Ports
Interfaces	Video Output	2 HDMI Ports
	Audio Input	4 HDMI IN, 4 3.5mm LINE IN
	Audio Output	2 HDMI OUT, 2 3.5mm LINE OUT
	Network Interface	1 RJ45: 10/100/1000M Adaptive
	COM port	3 Phoenix Connector RS232
	USB Interface	2 Type-A USB 2.0, 1 Type-A USB 3.0
	Power connector	Inner Diameter: 2.5mm, Outer Diameter: 5mm DC Power Socket
Power Supply	Input Power	DC 19V
Unit	Maximum Power Consumption	<30W



	Standby power	<2W
	consumption	
Operating environment	Storage Temperature	0° C~50° C
environment	Storage Humidity	90%RH
	Operating Temperature	0° C~50° C
	Working Humidity	70%RH
Accessories	HDMI SDI Converter	IT-HSDI3 and IT-SDIH3



IT-RS324



This product is an integrated device that incorporates audio and video capture, audio and video codec, audio and video processing, video recording, video on-demand, video live streaming, video switching, remote interaction, operation and maintenance management, HID reverse control, UVC/UAC, and other functions. The device utilizes an industrial-grade high-performance low-power ARM quad-core processor and is designed and developed based on an open-source and stable embedded Linux operating system, ensuring system reliability and stability. This product features intelligent and convenient operation, with a user-centric concept. It can fulfill audio and video-related needs in various application.



IT-RS324

Product Functions and Features

Pure Embedded Design

- 1. The system adopts a pure embedded system with an ARM multi-core processor solution, providing high stability and low power consumption.
- 2. The device comes standard with a 2TB high-speed disk and supports expansion to large-capacity disks.
- 3. Supports 7*24-hour operation.

Diversified Video Access Methods

- 1. Supports video access through RTSP protocol (up to 1920*1080 resolution)
- 2. Supports video access through ONVIF protocol (up to 1920*1080 resolution)
- 3. Supports video access via SDI (up to 1920*1080 resolution)
- 4. Supports video access via HDMI (HDMI interface supports up to 3840*2160 resolution, and is backward compatible with conventional resolutions such as 1920*1080)

Diversified Audio Access Methods

- 1. Supports 2 HDMI audio inputs.
- 2. Supports 4 SDI audio inputs.
- 3. Supports 3 line-level stereo audio inputs.
- 4. Supports 1 UAC audio input.
- 5. Supports various combinations of audio and video recording.

Ultra HD Video Recording

- 1. Supports up to 3840*2160 resolution video recording for movie channels.
- 2. Supports simultaneous recording of movie channels and resource channels.
- 3. Supports segmented and scheduled recording.
- 4. Supports MP4, TS, and other recording formats for convenient playback on various players and software editing.

*Picture for illustration purpose only



IT-RS324

Multi-Protocol Video Live Streaming

- 1. All channels support live streaming via protocols such as RTMP and HLS, facilitating integration with third-party platforms and systems.
- 2. Supports simultaneous live streaming of movie channels and resource channels.
- 3. Supports scheduled live streaming.

Diverse Management of Video Switching

- 1. Supports 8 layout modes to meet different scene needs.
- 2. Supports 11 transition effects for smooth and natural picture switching.
- 3. Supports subtitles, logos, and opening/closing credits, with preset options for quick and convenient access by users.

Efficient Management of Recorded Files

- 1. Supports one-click playback and deletion of recorded files through the software interface.
- 2. Supports external storage devices such as USB drives and portable hard drives, with one-click or automatic copying of recorded files.
- 3. Supports transferring recorded files to relevant platforms via FTP.

HID Reverse Control Function

1. The device supports HID reverse control, allowing users to operate connected computers through the software interface.

Centralized Platform Management

- 1. Supports operations such as powering on/off, restarting, and feature toggling for devices, reducing the workload of relevant staff.
- 2. Supports real-time viewing of device status and classroom inspection.
- 3. Provides open SDKs for third-party systems/platforms to integrate centralized management, device status, classroom inspection, and other related functions.



Built-in UVC Output

- 1. Supports the standard UVC protocol, enabling the broadcasting picture and any resource picture to be output through the host USB.
- 2. Supports standard UAC capture and playback, allowing recorded audio to be output while receiving external audio input.
- 3. Driver-free, plug-and-play, supports mainstream systems, and seamlessly integrates with third-party devices.

Display	Backlight Type	LED
	Resolution	160×32 Dots
	Operating System	Linux
	CPU Cores	4 cores
	RAM	4G
	Onboard Storage	2TB (supports replacement of mass storage)
System Unit Remote Wakeup Su		Supports local UDP wakeup, public TCP wakeup
	One-Click System Restore	One-Click Restore System Keys
	Protocol Support	HTTP, UDP, TCP, HLS, RTMP, RTSP, ONVIF, WEBSOCKET, FTP, NTP, DHCP, SIP
	Front Physical Buttons	Power, up and down control LED display, guide manual/automatic, capture, open interactive, open file management, record switch, live switch
	Video encoding standard	H.264, H.265

Technical Specifications



	Input Resolution	3840×2160p@60, 3840×2160p@30, 1920×1080p@60, 1920×1080p@30, 1600×1200p60, 1680×1050p@60, 1600×900p60, 1440×900p60, 1280×1024p@60, 1280×960p @60, 1280 x 800p@60, 1280 x 720p@60, 720 x 480p@60, 640 x 480p@60
	Output Resolution	3840*2160, 1920*1080
	Video Recording Format	MP4, TS
	Video Recording Bitrate	256kbps~20480Kbps available
Video Unit	Recording Bitrate Control	CBR, VBR, AVBR, QVBR, CVBR, FIXQP, QPMAP
	Video Recording Frame Rate	25~60fps
	Live Video Format	RTMP, RTSP, HLS
	Live Video Bitrate	256kbps~20480Kbps adjustable
	Live Video Frame Rate	25~30fps
Audio Unit	Audio Compression Standards	AAC
	Audio Compression Bit Rate	Adjustable from 32 to 192 Kbps
	Video Input	4* SDI, 2*HDMI
	Video Output	4* HDMI, 1* UVC
Functional Interfaces	Audio Input	1* 3.5mm LINE IN, 2* Phoenix Connectors LINE IN, 2* HDMI IN, 4* SDI, 1* UAC
	Audio Output	2* 3.5mm LINE OUT, 1* Phoenix Connector LINE OUT, 4* HDMI OUT, 1* UAC
	Network Interface	2* RJ45: 10/100/1000M adaptive

*Picture for illustration purpose only



	COM port	5* Phoenix Connectors RS232
		1* Type-A USB 3.0, 4*Type-A USB 2.0
	USB Interface	1* Type-B USB 2.0
		2* Type-C USB 2.0
	Power connector	1* DC Power Socket with Inner Diameter of 2.5mm and
		Outer Diameter of 5mm
	Input Power	DC 19V
Power Supply	Power Consumption	<35W
Unit	Standby power	<2W
	consumption	
	Storage Temperature	-0° C~+50° C
Operating	Storage Humidity	90%RH
Environment	Operating Temperature	0° C~50° C
	Working Humidity	70%RH
Accessories	HDMI SDI Converter	IT-HSDI3 or IT-SDIH3



IT-HSDI3/SDIH3





HDMI SDI Converters Technical Parameters

Model	IT-HSDI3	IT-SDIH3
Description	HDMI to SDI Converter	SDI to HDMI Converter
Input Port	HDMI (Female Connector)	SDI
Output Port	SDI	HDMI (Female Connector)
Resolution	SD, HD, Ultra HD, 4K	SD, HD, Ultra HD, 4K
Audio Support	Yes	Yes
Power	DC power adapter	DC power adapter
Consumption	4W	4W
Humidity	10%-90%	10%-90%
Operating Temperature	0°-50° C	0°-50° C
Storage Temperature	-10°-60° C	-10°-60° C