

### Description

The HD recording system with integrated human-computer interactive interface tablet adopts integrated hardware equipment and embedded Linux operating system design, and is highly integrated with built-in ultra-high-definition video capture module, recording module, live broadcast module, guide switching module, image segmentation and splicing module, and local echo output module to realize functions such as live video broadcast, intelligent guide, ultra-high-definition recording, and touch screen control. It is the latest generation of multimedia information recording and dissemination equipment independently developed for the practical training education industry, comprehensive live teaching, practical training and other needs.

#### Feature

- \* Adopt integrated hardware design, embedded Linux operating system, highly integrated system modules such as image recognition and tracking, automatic guidance, live broadcast, VOD, acquisition, recording, etc. It is easy to use, easy to maintain, and has high security.
- \* The controller comes with 2TB of storage space, 8GB of running memory, and 16GB of memory storage. The ultra-high performance and large storage space enable the recording content to be stored for up to 2,000 class hours, supporting frequent use of the device for more than a year; it supports automatic deletion of old files and loop recording.
- \* The controller has a built-in  $2W4\Omega$  speaker that can monitor local audio.
- \* Equipped with a 17.3-inch capacitive touch screen with a resolution of 1920\*1080 and using tempered glass ≥7H. The surface hardness provides the most user-friendly interaction method. It can respond quickly through gestures such as dragging, clicking, double-clicking, and long pressing.
- \* The video adopts H.264 and H.265 encoding and decoding methods, and the pure hardware DSP method collects, encodes and transmits high-definition video signals. It supports up to 9 channels of encoding and recording.
- \* Support simultaneous access to 19 channels of 1080P network cameras for decoding, support up to 16 channels of image synthesis output, and enable simultaneous online preview of 16 images.
- \* With 1 HDMI 4K video capture interface, which can realize simultaneous audio and video capture.
- \* With 2 channels of 3G-SDI video interface and support POC power supply.
- \* Equipped with 2-way HDMI video output interface, supporting maximum resolution input and output of 3840x2160@30fps.
- \* Support 1-channel Type-C device access, and Type-C capture supports up to 4K resolution.
- \* Audio transmission adopts AAC high-definition encoding method, 1 HDMI IN with audio input, 3 3.5mm audio input interfaces; 3 3.5mm audio output interfaces; 1 local audio speaker amplification, supporting audio mixing output.
- \* Support audio management function and support setting the volume of three-way 3.5mm audio input and HDMI audio input respectively.
- \* Built-in Gigabit network ports ≥ 4, 3 of which support POE power supply, meeting dual network isolation and physical isolation of wired networks and wireless networks.
- \* Support up to 9 channels of video stream recording, 1 channel of PGM screen recording and 8 channels of resource channel screen recording. The recorded file format supports standard MP4, AVI, MOV, FLV and MKV and other formats. The maximum bit rate supports 12M and the maximum resolution supports 3840x2160@30fps.
- \* Support custom segmented recording, with an optional duration of 30-480 minutes. It can be seamlessly connected to non-linear editing tools from other manufacturers. During the recording process, users can check the recorded duration through the recording controller. Users can manually control start/pause/resume and end recording, and the recording will automatically end after 8 hours without manually ending the recording.

# Recording Controller TS-06515

## Embedded DSP codec system V3.1

- \* Support the automatic appointment recording function. After the appointment recording schedule is edited, the recording will be automatically performed at the scheduled time, and the file name will be automatically generated with information such as the venue, speaker, and theme. During the recording process, important knowledge points can be marked at the current time point, and colors can be used to distinguish correct points from incorrect points. The video time can be marked with text after the recording is completed.
- \* With 1 RS-232 and 1 RS485 interface PTZ control function, support 3 USB interfaces, and 2 Type-C interfaces. It supports gesture control of the pan/tilt, zooming in and out, up, down, left, and right, and with stepless speed adjustment to achieve smooth and low-latency control of camera rotation to cope with various training scenarios.
- \* The controller supports a one-click reset function to avoid file damage, loss of IP address, and loss of administrator password, resulting in system inoperability.
- \* Built-in wireless sending module, paired with a receiver, support real-time transmission of live broadcast images over a 100-meter ultralong distance. It uses a self-developed private protocol to achieve ultra-low latency and ultra-high-definition image quality.
- \* Support the knowledge point saving function. For key training scenarios, the current training results can be taken and saved as screenshots. After taking a screenshot, it supports functions such as frame, brush, and text annotation to annotate the picture.
- \* Support video preview and playback function, which can preview and view the currently recorded video, and provide the slowest video playback speed adjustment of 0.5x, 0.75x, 1.5x, 2x, and 4x times. Support annotation on currently playing video screenshots and annotation functions for replaying.
- \* Support cooperation with third-party FTP file servers to automatically upload backup files. Support the rapid establishment of a file server through FTP server tools. Courseware is automatically pushed to the file server. Bandwidth can be automatically adjusted for file upload and download to prevent network congestion.
- \* Support RTSP, RTMP, RTP, TS and other streaming media protocols, with customized RTMP streaming function, and support three-way streaming at the same time to meet a variety of application scenarios.
- \* Support image settings such as logo and subtitles, support live broadcast screen background, image signal display background and other settings; support one-click start of live broadcast; drag and drop the video to the designated window according to the window screen.

#### Specification

Video protocol	H.264、H.265
Code stream	256Kbps~12Mbps
Video output format	MP4/MOV/MKV/FLV/AVI
Audio protocol	AAC
Live protocol	Support TS, RTSP, RTP and RTMP real-time protocol streams
Network protocol	Support TCP, UDP, RTMP, RTSP, FTP, DHCP, HTTP protocols
Video input port	1 HDMI video interface, 2 3G-SDI video interfaces (supports POC power supply), 1 Type-C device capture
Video output port	2 HDMI HD video ports
Split screen capability	Single screen, picture in picture, 2/3/4/5/6/8/16 screen split screen
Input resolution	Support 3840x2160@60fps, 1920x1080@60/50/30/25fps
output resolution	3840x2160@30fps、1920x1080@60/50/30/25fps
Audio input port	3 3.5mm audio input interface, HDMI IN1 input with 1-way audio input
Audio output port	3 3.5mm audio output interface, 1 local sound reinforcement (synchronous output)
Network port	4 802.3ab 1000Base-T Gigabit network interfaces, 3 of which support POE power supply
USB port	2 USB 2.0 interfaces, 1 USB 3.0 interface, support mouse/U disk/director switcher
Control port	2 control interface, support RS-232, RS-485
Recording method	Simultaneous recording of sound and video
Storage	2TB SATA
Navigation function	Support video preview/live screen monitoring/video switching/multi-screen live screen
	display/audio adjustment, etc.
Live recording function	Support real-time live broadcast/synchronous recording/movie mode recording/one-click push
	streaming and recording/local channel playback/built-in player
Software reset function	Support restoring factory settings
Software upgrade	Support USB upgrade
Internet function	Support local connection/automatically obtain IP address
Power supply	DC 24V/5A
Power consumption	45W
Reset button	Restore factory settings
Operating temperature	-10°C-55°C (ambient temperature under well-ventilated conditions)
Relative humidity of working environment	20%~80% relative humidity, no condensation
Weight	3.89kg
Dimensions (L×D×H)	401.8×257.3×38.8mm