HD Integrated Terminal

Description

As an integrated input and output terminal, it integrates powerful system functions such as visual management, KVM collaboration, splicing, network transmission, matrix, central control and fusion. It adopts a completely distributed structure design and supports unlimited unit extension; any unit failure will not affect the operation of the entire system, featuring high reliability. It is designed with a redundancy and backup design, bringing strong stability; it supports KVM cross-screen roaming, and mouse control with ultra-low delay. With built-in self-developed video splicing synchronization algorithm, it can be directly connected to the LED video wall. It is characterized by the desktop design (optional rack accessories) and elegant appearance.

Feature

*Support decentralized serverless architecture deployment; each node is independent of each other and does not interfere with each other, bringing higher system operation stability and reliability.
*Input and output integrated design, can be configured as input terminal, output terminal, KVM input terminal or KVM output terminal according to needs;
*Support YUV4:4:4 1080P@60fps high-definition video signal acquisition, encoding or decoding, display, and backward compatibility;
*When used as an output node, it supports 4-channel 1080P@60 H.265 signal decoding and display, supports YUV4:4:4/YUV4:2:2/YUV4:2:0 image formats, taking into account both image quality and signal compatibility;
*Adopt multi-stream transmission mode, high-definition stream 1080P, preview stream 360P, to meet the requirements of visual control;
*Support real-time preview of the input signal through the client, and the signal status is under control.
*Station logo: When used as an input node, without adding external devices, it supports adding pictures to the input source as the input source's logo. The logo can be set to display in the upper left corner, lower left corner, or customized X, Y coordinates. You can upload new pictures or use uploaded pictures for setting.
*Splicing wall subtitles: When used as an output node, without adding external devices, it supports displaying subtitles (such as welcome words, etc.) on the splicing screen. You can set the font type, font size, font color, background color, transparency, scrolling speed, font spacing, whether to center, display position, etc., and support dynamic scrolling of subtitles;
*Input box subtitles: When used as an input node, it supports displaying subtitles on the input source without adding external devices. You can set the font type, font size, font color, background color, transparency, display position, etc.
*Local high-definition base map: Without adding external devices, it supports the function of displaying the mosaic base map. Local pictures can be uploaded and set as the base map, and the base map function can be enabled or disabled on the software;
*With 3.5mm analog audio interface and HDM digital audio interface, it supports the transmission of original PCM audio without coding compression;
*Support KVM function, capture screen and send screen graphically (non-text), send screen to any monitor or large screen, support KVM cross-screen roaming, support virtual mouse control to optimize KVM operation experience, support cross-platform operation, including Windows, Linux, Mac and other system platforms.
*KVM supports OSD menu visual management, the number of preview videos on a single page can be adjusted as needed, the maximum number of previews on a single page can reach eight, and information prompts and confirmations are provided meanwhile.
*Support KVM role permission management, it can control KVM signal management permission through the server permission management function.
*The time difference between the picture at the signal source end and the picture after the signal source is collected by the input node, H.265 encoding at the input node, network transmission, H.265 decoding at the output node, and displayed at the output node can be as short as 10ms;
*Built-in self-developed video splicing synchronization algorithm, no splicing processor is required, it can be directly connected to LED, LCD, DLP and other splicing screens, and the picture is synced without tearing.
*Embedded with input synchronization function, it supports 4 input nodes for synchronous acquisition and synchronous encoding of a 4K high-resolution signal source, and transmits it to 4 output nodes for synchronous decoding and synchronous display.The entire 4K signal picture is clear and smooth, realizing 1:1 display of 4K high-resolution sources on the wall;
*With central control function, independent RS-232 serial port, RS-485 interface, 2-way RELAY interface, 3 IO ports and 4 infrared output ports; support custom programming.
*Built-in infrared learning module, it can learn the infrared codes of infrared remote control equipment including camera remote control.
*The control interface supports two-way data transmission, and supports access to sensor devices to display environmental data and other information on the tablet.
*With a 2.23-inch OLED display, it can display the terminal IP address and operating status in real time.
*The structure adopts desktop design, optional cabinet cooling rack, unified power supply management.
*Adopt embedded linux system, support 7x24 hours of continuous boot operation.
*Support online batch quick upgrade through the server.
*Support automatic recovery after abnormal power failure.
*Support one-key reset dynamic IP, one-key reset and restore file system functions.
*Support POE, adapter dual power supply, low power consumption, maximum 12W.
*Support fiber/network port dual-link backup.
*Support network packet loss repair mechanism, when 20% network packet loss, the audio and video is clear and smooth, without freeze or mosaic.
*The terminal node supports the offline maintenance function. When disconnected from the server, the original display screen can still be displayed and output normally, without screen freeze or blackout.
*Support national secret algorithms SM2, SM3, SM4 to encrypt and transmit signaling and media streams to ensure data security and controllability.
*Support the push function of visual video wall, which can display the video wall image in real time, adjust the screen layout of any video wall, the splicing mode of signal source, and control the zoom in, zoom out, and movement of signal source.
*Support one-click push of the currently taken over video signal to be displayed on any window of any video wall.
*When used as an output node, it supports setting an audio equalizer, which can be enabled or disabled, as well as dynamic compression. It has 18 built-in common equalizer scenes that can be switched with one click or fully customized. The gain can be controlled individually for different frequency bands such as 60Hz, 170Hz, 310Hz, 600Hz, 1KHz, 3KHz, 6KHz, 12KHz, 14KHz, and 16KHz, with a range of -20dB to 20dB.
*Support signal cropping function, you can set cropping coordinates, cropping width and height to crop the input signal.
*Support signal source annotation function. When used as an input node, you can annotate the input signal through the control panel, PC, KVM seat, and web terminal. When used as a KVM output node, you can annotate the input box signal that is taken over. When annotating, you can support free drawing, straight line, arrow, square, circle, triangle and other annotation forms. You can set the thickness and color of the annotation line, undo or restore the annotation operation, and delete the annotation or delete all by selecting the eraser.
*Support adding time display control, you can set the coordinate position, font size, font color, background color, transparency, font spacing, font type, display style, etc. of the time display.
*Support adding temperature display control, you can set the coordinate position, font size, font color, background color, transparency, font spacing, font type, temperature prefix, temperature suffix, etc. of the temperature display.
*Support adding humidity display controls, and can set the coordinate position, font size, font color, background color, transparency, font spacing, font type, humidity prefix, humidity suffix, etc. of humidity display.
*Support adding real-time people counting controls, and can set the coordinate position, font size, font color, background color, transparency, font spacing, font type, statistical prefix, statistical suffix, etc. of statistical display.
*Support KVM account following function, after logging into any KVM wall, automatically open the window to display the signal source used last time.
*Support setting the wall window layout to 1P, 4P, 9P, 1+4P, 1+5P, 1+7P, 2+8P, 1+12P, 16P and other common layouts, and can also customize the number of rows and columns of the wall layout, support using the original layout of the wall output box, and can turn on the automatic fill layout mode.
*Supports OCR text recognition function, which can capture a computer screen captured by the input box as a picture for AI analysis, extract the text in the picture and transfer it to another computer through the KVM output box, and the extracted text can be pasted into a file.

Specification

Model	TV-731F
Processing capability	Support 1920*1080P@60fps, 1920*1080P@30fps high-definition video signal input and output and backward compatible, 4 channels 1080P@60 H.265,Support YUV4:4:4/YUV4:2:2/YUV4:2:0 multiple image formats
Codec capability	Support H.264/H.265 video coding, PCM audio lossless transmission
Video port	1*HDMI IN (support audio), 1*HDMI OUT(support audio)
Audio port	1*3.5mm stereo input, 1*3.5mm stereo output, input sensitivity: 775mV
USB port	2*USB2.0 (KVM interface)
Network port	1*RJ45, 10/100/1000Base-T
OPTICAL port	1*SFP
Serial port	1*RS-485, 1*RS-232
Infrared port	1*IR learning window, 4*IR OUT
I/O port	3*I/O port
Weak relay port	2*RELAY port
Reset button	1*pinhole RESET button
Mode switch	1* input and output mode switch
Display screen	2.23-inch OLED display with128*32 pixels
Power supply	DC 12V /POE
Max power consumption	12W
Ambient temperature	-10°C~45°C (working state) -15°C~ 45°C (non-working state)
Ambient humidity	5%~90% (working status), no condensation
Weight	About 0.9kg
Dimension (L*W*H)	222*117*43.8mm