



Description

It is a multimedia IoT teaching terminal integrating functional modules such as audiovisual matrix, IoT central control, DSP audio processing, amplifier and network decoding. Characterized by high equipment integration and strong extendability, it is suitable for conventional classrooms, multimedia classrooms, lecture halls, etc.

Feature

1. Standard 1U rack design, black anodized aluminum brushed panel, professional mechanical assembly process.
2. The equipment is highly integrated, with built-in audio switching module, video switching module, infrared learning and transmission module, equipment power management module, electric curtain control module, power amplifier module, network broadcast module, and control interface module.
3. Built-in matrix switching module, supports 4-way HDMI high-definition input, 2-way HDMI high-definition output, and can realize audio and video synchronous output.
4. It has 1 RJ45 microphone interface, which can be connected to 1 microphone, providing clearer and more stable audio input for teaching or conference.
5. Built-in digital wireless teaching receiving module, which can simultaneously connect 2 teaching wireless handheld microphones. Audio transmission adopts microphone wireless audio transmission technology based on U segment. Wireless audio transmission should meet the frequency modulation range of 640MHz to 690MHz, and should also have automatic frequency scanning and frequency matching technology functions.
6. It has 1 wireless handheld microphone infrared frequency matching expansion interface, which is used to connect an external infrared frequency matching transmitter to expand the frequency matching range.
7. It has 2 digital wireless antenna expansion interfaces for external receiving antennas to expand the receiving range.
8. It has a built-in intelligent digital power amplifier module with 4 power amplifier output interfaces. The maximum power of each power amplifier is 100W, which can be directly connected to a fixed-resistance speaker to meet local sound reinforcement needs.
9. It has integrated network broadcasting function and built-in integrated network IP decoding module, which can be used as a digital broadcast decoding terminal. It can realize timed ringing, audio playback, remote on-demand programs on mobile phones, and broadcast shouting functions with the network broadcasting system. It can be used with a fire collector to connect to the fire short-circuit input signal to realize the fire alarm function of the entire area and the partition.
10. With digital signal processing (DSP) function, the DSP audio processing module is integrated into the device with an integrated design to ensure the compactness, stability and ease of use of the system, and meet the following parameters: 2-way feedback suppression, and 5-level frequency shift suppression effect for each channel; 5-way input gain adjustment, each input can be individually set to mute and gain adjustment, the adjustment range is -72~12dB input; 5-way adjustable input noise gate setting, the switch can be set individually, the threshold is -72dB~0dB, the establishment time is 1ms~500ms, and the release time is 50ms~3000ms; has 3 input signals, and each signal has 15-band equalization adjustment; has an audio matrix function with 4 inputs and 2 outputs; has 2 output signals, and each signal has 15-band equalization adjustment; has 2 output gain adjustment, and can set mute and gain -72dB~12dB separately; has 2 output adjustable limiter function, can set the switch separately, threshold -60dB~0dB, build time 1ms~500ms, release time 50ms~3000ms, and has 4 kinds of sound effects quick save and start function.
11. It has the test audio backup function. When the network is abnormal or the device is powered off, the broadcast signal automatically switches from the digital network signal to the analog constant voltage signal for playback. The test audio backup switching delay is ≤ 300 ms to ensure the normal playback of the audio signal.
12. It has 1 power control interface, supports delayed power-off function, and the delay time can be customized to ensure that the device is automatically shut down normally before powering off, which can effectively protect the device.
13. It has 1 curtain control interface, which supports the control of electric curtain raising/lowering/pausing functions. The interface adopts European standard design to prevent users from connecting other electrical devices to this interface, thereby avoiding damage to the equipment.
14. It has 1 infrared learning port and 2 IR control ports, which can control infrared remote control devices such as cameras, TVs, projectors and air conditioners.
15. It has 2 weak relay interfaces, which can trigger and control power sequencers, electric locks and other devices.
16. It has 2 RS-232 two-way communication interfaces, which can control third-party devices such as projectors, signal switchers, power controllers, dimmers, cameras, etc.
17. It has 2 RS-485 control interfaces, which are independently programmable and can be connected to sensors such as temperature and humidity, current detection, PM2.5 detection, and hanging microphone processors. It can expand the management and control host to realize real-time monitoring of the classroom environment, and automatically adjust the classroom to a comfortable learning environment based on the linkage control of the monitoring data.



18. It has 2 I/O control ports, which can realize computer switch control, can connect to switch quantity sensor devices such as human perception/disconnection alarm, and can realize functions such as door magnetic state feedback.
19. It has 1 Wiegand protocol interface, which can be connected to an external card reader, expand the management and control host to realize the card swiping attendance management function, support the definition of card swiping mode, and automatically link the class mode/get out of class end mode by swiping the card.
20. It adopts cross-platform software technology and is matched with the control host. It has 8 terminal control and management, including teacher web terminal, administrator web terminal, Android APP, Apple APP, touch control screen, H5, WeChat applet, DingTalk, and can realize trigger linkage and timing control, allowing customization of all scene actions and providing flexible operation options.
21. It supports multiple classroom control panel setting strategies, and uses the combination of card swiping and control panel buttons to control the terminal to avoid irrelevant personnel operation. It needs to expand the management and control host to achieve.
22. It has 1 reset button, supports one-key reset function, and can restore to factory state with one key.
23. The whole system has flexible scalability and powerful network control function. It can be expanded through the network to access serial infrared control modules, I/O modules, relay modules, lighting control modules, etc., to achieve the deep integration of classroom Internet of Things, environmental perception and "Internet +".

Specification

Network interface	Standard Rj45
Network rate	100Mbps
Video input interface	4 channel HDMI , HDMI1.4 standard
Video output interface	2 channel HDMI , HDMI1.4 standard
HDCP protocol	Support
Resolution ratio	3840x2160@30、1920x1080@60
EDID	2
Audio input	1 RCA, 1 channel RJ45, 1 channel 100V analog backup signal, 2 channel U-segment wireless receivers, network broadcast audio source, 4 channel HDMI
Audio output	1 set of RCA, 2 channel HDMI
Rated total power output	120W
Front speaker output	2*100W (MAX) /8Ω
Center and rear speaker output	2*100W (MAX) /8Ω
Audio input sensitivity	Unbalanced 775mV
Audio output sensitivity	Unbalanced 1V output
Signal-to-Noise Ratio	>73dB(A)
RS-232 port	2 channel
RS-485 port	2 channel
I/O	2 channel
Remote control panel interface	Independent RS485 interface
Infrared sending port	2 channel
Weak relay port	2 channel
Wiegand protocol interface	1 channel
Power Output	1 channel , AC 220V 50Hz (400W MAX)
Electric curtain control interface	1 channel , AC 220V 50Hz (100W)
Wiegand protocol interface	1 channel
Operating Voltage	AC 220V 50Hz
Power consumption	400W (Power consumption and electric curtain power consumption are calculated separately)
Working temperature	-10°C~+45°C
Relative humidity of working environment	20%~80% relative humidity, no condensation
Overall size(L×D×H)mm	484×315×44
Weight	4.5kg