Specification for 86-Inch Smart Board

Product Name	Parameters

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   o **86-Inch Smart Board**
 	
	• **Display Requirements:**
	
	  o Display size: ≥86 inches, LED backlight; aspect ratio 16:9.
	  o The LCD screen utilizes industrial-grade A-class liquid crystal panels, with a resolution of ≥3840x2160, brightness of ≥400cd/㎡, and a viewing angle of ≥178°.
	
	• **System Requirements:**
	
	  o The device features an integrated design, with no visible internal wiring or connectors.
	  o The frame is constructed from aluminum alloy (providing superior heat dissipation, resistance to deformation, and effective protection for the touch unit), rejecting the use of sheet metal or plastic frames, ensuring structural integrity.
	  o The device is resistant to salt mist corrosion, vibration, and shock, ensuring durability during transport and use.
	  o Front controls and interfaces include: power switch, volume up, volume down, eye protection, screen recording, home, settings, and touch switch.
	• Front interfaces: HDMI1, Touch USB1, USB3, Type-C1. Side interfaces: RJ451, AV IN1, USB 3.01, RS2321, HDMI IN1, TOUCH USB1, Earphone1, SPDIF1.
	• The system includes a one-click recovery function for the OPS computer, facilitating system troubleshooting.
	• Equipped with an intelligent light-sensing module, capable of adjusting screen brightness based on ambient lighting conditions.
	• Features two front-mounted magnetic slots for pen storage, ensuring pens are securely held.
	• Front-facing screen recording button enables simultaneous recording of courseware, audio, and ambient sounds.
	• Built-in speakers: ≥2*15W front full-range speakers.
	• The system is powered by an embedded Android version ≥11.0, with a minimum of 32GB ROM and 4GB RAM.
	• Supports five-finger gesture-based screen off and wake-up functions.

•	• Customizable power on/off timing settings.
	• Hardware diagnostics feature, providing status updates on the motherboard, memory, storage, CPU, system software, touch unit, OPS module, light sensor, network, etc.
	• Supports local app management, including forced termination and uninstallation.
	• Built-in screen mirroring software for mobile device projection.
	• Features a screen lock function, with options for password, gesture, or USB KEY-based unlocking.
	• APP locking function to manage and restrict the use of built-in apps.
	• Integrated non-external camera with a minimum resolution of 48MP and autofocus functionality.
	• Integrated eight-array microphone with a pickup range of ≥8 meters.
	• Glass surface: 4mm tempered glass with a hardness of ≥9H (anti-glare option available).
	
	• **Touch System:**
	
	    o Employs infrared touch technology, supporting HID plug-and-play, with no driver installation required. Simultaneous multi-touch functionality is available for writing and operation.
	    o Maximum touch support: 20 touch points on Android, 40 touch points on a computer.
	    o Touch accuracy: ±1mm, single-finger response time: <8ms.
	    o Touch resolution: 32767*32767.
	
	• **Built-in Modular Computer (Optional):**
	
	    o Modular design with a standard 80-pin OPS-C interface, eliminating external cabling for ease of use and maintenance.
	    o Processor: Intel Core i5 or higher; memory: ≥8GB DDR4; storage: ≥ 256GB SSD.
	    o CPU: Quad-core with four threads, supporting a 6MB L3 cache.
	    o Operating system: Windows 7 or later, 64-bit professional version.

5. Electronic Whiteboard Software (Optional):

1. Writing: Supports up to 10 simultaneous writing points with customizable pen color and thickness.

2. Gesture-based erasure functionality.

3. Customizable menu for the whiteboard interface, with drag-and-drop options to add or remove function keys.

4. Text Box: Supports text input with customizable font, size, color, bold, italic, underline, and bullet points, offering over 20 preset fonts.

5. Basic Brushes: Includes pencil, highlighter, brush, marker, texture pen, magic pen, and pattern pen, with 19 preset textures and 10 preset patterns.

6. Shape Editing: Allows copy, cut, paste, clone, lock, delete, move, and adjust shapes. External linking to online resources is supported.

7. Auxiliary Tools: Includes magnifier, spotlight, curtain, ruler, protractor, compass, and other essential tools for various subjects.

8. Object Insertion: Supports image formats such as PNG, BMP, WMV, JPG/JPEG, and document formats like DOC, PPT, etc.

9. Sub-Board: Enables use of an auxiliary whiteboard without affecting the main screen, enhancing the teaching experience.

10. Direct desktop access for seamless integration with teaching resources.

11. Eraser Modes: Supports object erasure, point erasure, and full-page clearing options.

12. Customizable whiteboard backgrounds, including grid and staff line templates for specific teaching needs.

13. Direct capture from a document camera for static content, with zoom and rotate functions.

14. Page Replay Function: Automatic playback of selected pages without manual recording.

15. Screen Recording: Records all actions and annotations on the screen, along with audio, saving them as video files.

16. Transparent Page: Easily switch between writing and cursor mode, with quick access to USB features.

17. PPT Annotation Follow-up: Annotations follow the PPT slides during the presentation and are automatically removed after closing the PPT.

18. Lifetime free software updates.

Smart Interactive Display Features

1. Multi-Themed System: Offers conference, education, technology, and welcome templates, along with industry-specific templates for business, government, healthcare, education, and advertising. Supports multi-user sign-in, saving, and QR code sharing.

2. Signal Source Preview & Dynamic Wallpapers: Provides real-time previews of signal sources, supports static and dynamic wallpapers with one-click preview and quick switching, and allows for custom wallpaper uploads.

3. Energy-Saving Modes: Supports multiple power-saving options, including screen sleep, screen saver mode, and scheduled power on/off.

4. Real-Time Temperature Monitoring: Displays real-time device temperature on the Android homepage, with color-coded alerts and automatic shutdownwhen overheating occurs.

5. Multi-Screen Interaction: Supports wireless screen sharing for more than four devices, including iOS, Android, PC, and Mac.

6. Smart Signal Detection: Automatically switches to the active signal source when connected and prompts a confirmation dialog.

7. Comprehensive Security Lock: Provides USB lock, screen lock, application lock, and touch lock for enhanced security.

8. Image Mode: Allows users to configure display settings directly within the signal source channel, offering a real-time preview without exiting the menu.

9. Multiple Sound Modes: Supports selecting different audio devices such as speakers and USB microphones, with an integrated equalizer function.

10. Adaptive Ambient Light: Automatically adjusts screen brightness based on ambient lighting conditions and includes a blue light filter mode for eye protection.

11. All-in-One Power Button: Supports dual-mode and three-in-one settings, enabling energy-saving, OPS computer power control, and integrated display power management.

12. USB Device Sharing: Allows seamless switching between Android and PC, with access to floating menus and a customizable sidebar.

13. Customizable Background & Gesture Controls: Allows background color changes when no signal is detected and supports five-finger screen-off and three-finger gesture navigation.

14. Multiple Unlocking Methods: Unlock via remote control buttons, key combinations, password input, or USB device authentication.

15. TV Remote Keyboard Simulation: Supports essential PC keyboard functions, including F1–F12 keys and Alt+F4 commands.

16. Pull-Up Menu: Enables an on-screen pull-up menu that can be toggled on or off based on user preferences.17. Centralized Control: Allows external device management of system functions such as volume, channel, audio, and signal source selection.

18. Multi-Language Support: Provides over 12 language options for system interfaces, settings, applications, and full-system language synchronization.

19. Network Configuration & System Monitoring: Supports wired and wireless network setup, online updates, and real-time system uptime display.

20. Search Function: Enables quick search of system settings and functions within the menu.
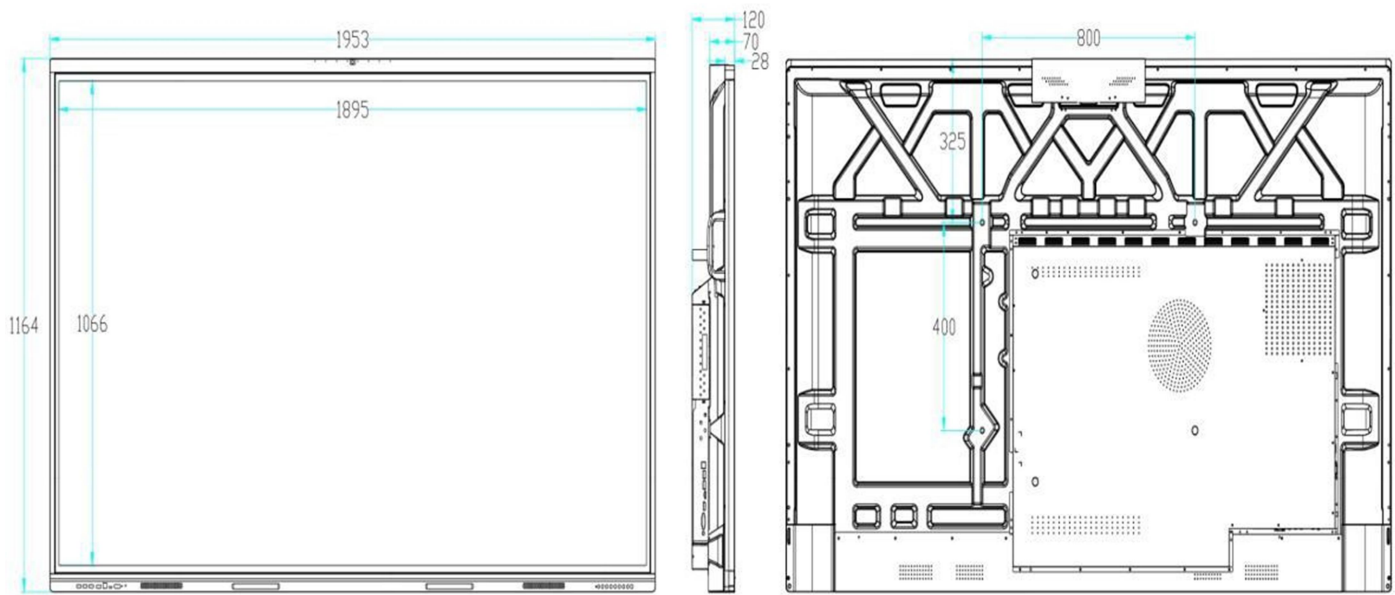
21. Android Whiteboard: Supports single/multi-touch writing, gesture erasing, zooming, and panning. Features email sending, table insertion, QR code sharing, and saving in document, PDF, or JPG formats. Includes pen customization, original handwriting recognition, and page selection options.

22. File Management Software: Automatically organizes, views, and edits documents from multiple systems and USB storage devices.

23. Channel Customization: Supports personalized startup channels and renaming of channels. Allows full-channel annotations with quick pen color settings, annotation previews, and seamless import of annotated pages into whiteboard software.24. System Optimization Software: Provides system overview, application management, and memory optimization. Monitors OPS computer, touchscreen, temperature, display, and other hardware components with alerts.

25. Quick-Access Sidebar: Includes tools such as calendar, timer, magnifier, curtain, camera, calculator, spotlight, and compass, with customization options. Supports quick access to browsers, whiteboards, welcome templates, file management, and third-party applications for essential teaching, training, and meeting functionalities.

DRAWING :

SPEC.	Size	86"
LCD Panel	Display area (mm)	1874(H)×1057(V)
	optimum resolution	3840×2160 pixels
	Refresh the frequency	60Hz
	luminance	300-350cd/m2
	contrast ratio	5000:1
	Visual Angle	1780(H/V)
	Show color	8bit 16.7M/1.07B (10bit)
	backlight	DLED
	colour gamut ntsc	72%
	life span	For 50,000 hours
surface	Body material	Aluminum alloy face frame, oxidized sandblasted silver black
	Front frame color	Upper and lower silver; left and right black [standard], can be customized all black
	Front frame glass	Physical tempered grade 9 explosion-proof glass / anti-glare explosion-proof grade 9 tempered glass
	Front box pen slot	The two magnetic grooves on the front
Touch parameters	Identification principle	Infrared recognition
	Touch embedding mode	Built-in one-piece
	The way of writing	Finger, touch pen or other 2mm non-transparent object (full screen writing)
	Number of touch points	At 20 o'clock
	Touch resolution	32767*32767
	Touch precision	±1mm
	Single refers to the response speed	< 8ms
	Touch number	The theoretical number is infinite
	drivers	System automatic identification, no drive
	support system	windowsXP/7/8/10,Android,MacOS,Linux
	working temperature	-10~+50 ℃
	communication mode	USB 2.0/USB 3.0
os	scheme	T982
	CPU	Quad-core ARM Cortex-A55
	GPU	Mali-G52 MP2(2EE)
	basic frequency	1.9GHz
	internal storage	4G DDR
	memory	32GB (EMMC)
	Wi-Fi	2.4GHz/5GHz
	System version	Android 11.0
Built-in camera	camera	The 48 million autofocus camera
	Array wheat	Eight array of voice microphones
Front	Enter the port	USB 3.0×1

interface		USB 2.0×2
		not have
		not have
		not have
	Prehole position	not have
		Remote control receives the indicator light 1
key	Eight buttons	Switch, volume +, volume-, eye protection, recording screen, home page, setting, touch switch
Inputs/outputs	Enter the port	RJ45：×1
		TOUCH USB：×1
		USB3.0：×1
		USB2.0：×1
		RS232：×1
		TOUCH USB(HDMI)：×1
		HDMI 1：×1
		HDMI 2：×1
		AV IN：×1
	Other ports	AV OUT：×1
		Earphone：×1
		SPDIF OUT：×1
		Front HDMI：×1
		OPS USB：×1
Power	The power of the machine	≤400W
	OPS power	≤120W
	working voltage	100~240V AC, 50/60Hz
	Standby power consumption	≤0.5W
	Sound channel stereo	two
	Dual-channel power	15W / 8 O. 22 speakers
Working environment	service temperature	0~40℃
	operation humidity	10%~90% RH
	Storage temperature	-20~60℃
	Store humidity	10%~90% RH
	above sea level	5000 Meters
Size and weight	Size, length, width and height (mm)	1953×120×1164
	Package dimensions, length, width and height (mm)	2100×210×300
	VESA stent hole position (mm)	400(V)×800(H)
	Wall hanging thickness (mm)	36mm
	net weight	68KG
	rough weight	79KG
Standard lists	Accessory box	×1
	Power line-gb 1.8M	×1

	Certificate (neutral)	×1
	Warranty Card (Neutral)	×1
	Remote control (battery-free)	×1
	Touch pen (magnetic suction)	×2
	Wall hanging frame	×1
Optional list	HDMI line	×1
	TOUCH USB Line	×1
	Intelligent page turning pen	×1
	Wireless screen casting device	×1
	traversing carriage	×1