

Item	Hisense WR Series Interactive Digital Board
Interactive Digital Board	<p><b>I . Display Parameter</b></p> <ol style="list-style-type: none"> <li>1. 65",75",86" inch LED backlight panel, resolution 3840*2160, A standard Panel proof.</li> <li>2. Display ratio: 16:9; view angle: <math>\geq 178^\circ</math>; brightness: <math>\geq 350\text{cd/m}^2</math> (65"/86" <math>\geq 350\text{cd/m}^2</math>, 75" <math>\geq 400\text{cd/m}^2</math>) ; color temperature: K8000-K12500*.</li> <li>3. Color gamut <math>&gt;85\%</math>NTSC (65"/75" <math>\geq 72\%</math>NTSC, 86" <math>\geq 85\%</math>) .</li> <li>4. Brightness uniformity<math>\geq 80\%</math>, Chromaticity inhomogeneity <math>\Delta u'v' \leq 0.015</math>.</li> <li>5. Static contrast<math>\geq 1200</math>: 1. Dynamic contrast<math>\geq 4000</math></li> <li>6. Display Colors 10bit (1.07B); Grey scale 256, max grey scale 1024.</li> <li>7. DLED backlight design, MTBF <math>\geq 50000</math> h.</li> </ol> <p><b>II . Product specification</b></p> <ol style="list-style-type: none"> <li>1. front 5 input ports (HDMI、Touch、USB2.0*2、USB3.0), USB port support Intelligent switching between android and windows.</li> <li>2. Support HOME button lock screen.</li> <li>3. The drawing shell on the front of the whole machine, and the arc corner is connected without sharp edge.</li> <li>4. AG cover glass, Glass transmittance<math>\geq 88\%</math>, Surface glossiness <math>70 \pm 10</math>, Haze 4-8%, Hard 7H.</li> <li>5. In order to improve the conference sound quality, it has built-in dual cavity four-wheel drive sound system, two speakers and full coverage of high and low tones, Power 15W<math>\times 2</math>, Stereo output support.</li> <li>6. Environmental adaptation:working temperature <math>-10^\circ\text{C}—40^\circ\text{C}</math>,storage temperature <math>-30^\circ\text{C}—60^\circ\text{C}</math>. Normal use below 5000m above sea level.</li> <li>7. Professional video decoder Hi-Impex VII engine, MEMC engine Motion Engine.</li> <li>8. The product embedded android system, no additional model, the platform performance dual core A73+dual core A53 working frequency 1.7GHz, quad core Mali-G51 GPU, RAM 3GB, ROM 32GB, Ensure stable and smooth system performance.</li> <li>9. The product should be controlled by remote control, like adjust volume, picture.</li> <li>10. Based on android 8.0 or above, and win10 Customized conference system, convenient use.</li> </ol>

11. Optional with Windows conference model.
12. Support HDMI 2.0 ARC protocol, Digital board sound can return to amplifier or external sound system.
13. The product should support one button turn off and on the backlight without shutdown the Power, realizing saving power over 80%.
14. Support several intelligent backlight adjustments: vivid, soft, light sensor etc. ◦ (unique)
15. With auto brightness sensor, the screen can automatically adjust the brightness of the display by intelligently sense ambient light according to the environment, bringing users comfortable eye feeling and can effectively control energy consumption.
16. The product support automatic upgrade and manual upgrade mode: automatic upgrade realized through OTA (Over — the — Air Technology) .
17. Embedded 2.4G and 5G band Wi-Fi AP function, and the channel can be set.
18. Support WLAN share, one Ethernet cable connect to the product, both the android and windows can connect to the WLAN at the same time.
19. The product interface: (unique)
  - USB input port 4
  - Touch USB :1
  - OPS port: 1
  - HDMI input (side) : 1 (HDMI2.0)
  - HDMI input (front) : 1 (HDMI2.0)
  - DisplayPort input:1
  - HDMI output: 1
  - VGA input: 1
  - VGA audio input: 1
  - SPDIF output: 1
  - Ethernet: RJ45 1

RS232: 1

**OPS model : intel 8<sup>th</sup> CPU i5**

USB3.0 : 6

VGA output: 1

HDMI output: 1

DisplayPort output: 1

headphone: 1

micro phone: 1

Security lock hole: 1

20. HDMI output support 1080p and 2160p.

21. The fuselage has the characteristics of anti-salt fog corrosion to avoid rusting and aging during long-term use.

22. The product complies with Surge, ESD, EMC, EMI, comply with CE and CB.

23. The product has the characteristics of anti-vibration and anti-drop to ensure that the whole machine is not easy to be damaged during transportation or use .

### **III. Touch parameters**

1. Touch technology: infrared 20-point touch control technology is adopted.

2. Method of writing: Light - proof objects such as finger or stylus, support multiple simultaneous writing, writing while erasing; Support 20 pen writing at the same time, writing delay time≤40ms.

3. Touch resolution: 32768×32768; Initial response time≤4ms, Continuous response time≤2ms, , Effective touch recognition≥3mm, Positioning accuracy: ±0.1mm.

4. The monitor has anti-interference performance of strong light, Under the bright light of 100K LUX , All writing and touch functions are unharmed, After the completion of the irradiation test, all writing and touch function of the device are unharmed.

5. To ensure the service life of the touch, the service life of the touch box is more than or equal to 100,000 hours.

6. The monitor touch frame free drive, compatible with Windows XP, vista, win7, win8, win8.1, Mac OS, Linux and other systems.
7. The surface glass is made of tempered glass with a hardness of  $\geq 7H$ . After the impact test of the glass, the steel ball with a mass of 2260g was used. After the vertical impact of the free-falling body at a height of 0.5m above the screen, the product had no damage and fracture and no abnormal function.

#### **IV. Local meeting function parameters**

1. For convenient, there is no need for additional module access, and whiteboard software can be used for writing and other operations by using the all-in-one machine.
2. When you start up, you can enter the homepage launcher interface, with the switch between dynamic wallpaper and static wallpaper. The dynamic wallpaper can be looped without any lag, and 4K resolution wallpaper pictures are supported. (currently exclusive)
3. The customized startup animation, LOGO, screen saver and welcome page can be replaced by a U disk, which can be customized according to different customer scenes.
4. For convenience, the Windows and android systems integrate the super taskbar, including: opening/switching/closing the app (the way to close the app includes single closing and one-click closing), task view, home page, screenshot, Settings, network status, time/calendar, and touch wizard menu entry. The super taskbar is drawn up from the bottom touch, and can be automatically hidden when not in action.
5. Global left quickly pool out the white board, into the split screen state, do not interrupt or block the original full screen application, you can drag the scale of the white board。
6. Windows and any system of android support to open two or more split-screen applications, can support left and right split screen display at the same time, Facilitate the comparison of documents
7. When the split screen is displayed, it supports the drag of the dividing line in the middle of the screen, changes the proportion of the split screen application window, and changes the adaptive menu and content of the application with the split screen proportion. (currently exclusive).
8. In the split screen, the split window can be switched/dragged to make the meeting content more flexible. (currently exclusive).
9. In the task view of the super task bar, it supports to view background running applications. You can select application to switch and open,

which is convenient and quick to operate; The full-screen application running, and the background application is displayed separately with the foreground application when it is adjusted.

10. In the task view of the super task bar, support background running applications to be closed individually or all with one key.
11. Soft pen writing/hard pen writing is supported, and mode can be switched through the options: writing is smooth, real-time display, no obvious delay.
12. The handwriting is smooth and clear without broken lines, no burrs, no serrations and no blurring after magnification;
13. Single/multi-people writing: single/multi-proper writing is supported, and mode can be switched by options; In single-point writing, multi-touch is a gesture operation, Writing and gestures do not interfere with each other. Writing while erasing, writing/erasing does not interfere with each other.
14. The function keys in the whiteboard are placed in a unified position, and the middle and bottom positions of the screen are located, so that the required functions can be easily and quickly found and the number of buttons can be kept compact.
15. White/red/yellow three common colors quickly select, more brush colors: support to change a variety of brush colors, users can customize brush colors, support memory of 3 custom colors.
16. Revocation and Recovery: Revoke one-step operation with unlimited number of revocation steps; Resume the operation that was revoked in the previous step. There is no limit to the number of recovery steps. (unique)
17. Support graphic recognition, graphics include: square, diamond, circle, oval, triangle, arrow, line segment, etc., and support non-recognition as graphic handwriting erased at any time; Basic pattern recognition is turned on/off through option switching.
18. Support intelligent chart drawing, add table rows and columns by hand drawing after identifying rectangular figures, the writing area in the table can adapt to the size according to the writing content, and the table content and table boundary can be selected and dragged at the same time; You can directly click the button to add rows or columns after forming a table object. In addition, smart icons support deletion of rows/headers and color filling.
19. Insertable pictures: Insert pictures into the meeting content in the meeting whiteboard, supporting zoom, roaming, rotation and deletion. (At present, only Hisense inserted pictures can be rotated)

20. For writing effect and convenient use, whiteboard writing needs to support highlighter effect and handwriting copy and paste function. (unique)
21. Meeting minutes can be saved in PDF and custom format at the same time. PDF meeting minutes can be sent to U disk or mailbox with one click, or the meeting minutes can be taken away by scanning codes.
22. The contents of the meeting minutes support LAN sharing and are safe and free from leakage. The minutes of the end of the meeting can be cleaned up without leaving any marks. (unique)
23. Local saved meeting minutes can be re-edited. Meeting minutes can be exported through U disk or mailbox, and can be re-imported and edited.
24. Can use third-party programs to open Office, PDF and other files, and annotate and save screenshots at any time.
25. Exception recovery: After the meeting whiteboard exits/crashes abnormally, the last meeting content can be automatically cached at the next start.
26. Gesture operation: gesture zoom, gesture roaming, gesture erasing, improve efficiency.
27. It supports adding  $\geq 20$  pages to the whiteboard, each page can be written and cleared separately, and all pages can be exported/saved/shared as a unified file.
28. File Manager: supports browsing, searching, previewing, classifying, sorting, copying, pasting and other operations of local and U disk files; Local documents can be shared through two-dimensional codes and emails.
29. Application Management: Support the management of Android applications such as installation, uninstallation and cache removal.
30. Full channel annotations: You can quickly enter annotations under any channel with one click, and you can save annotations under any channel to local or U disk.
31. For convenience, no matter under win10 or under android, the touch board can be used to select the screen area or full-screen screenshots, and can be directly imported into the whiteboard or saved locally.
32. Support two-way interaction between Android/iOS phones and touch board: mirror screen transfer, large screen transfer and small screen, remote control, echo control and file transfer; When the personal device is transferred to a large screen, you can set the password and

conduct remote operation of the large screen to the personal device. When the image of the large screen is transferred to the personal device, you can also conduct remote operation.

33. Whiteboard writing supports unlimited roaming, which can enlarge and reduce the range of the entire whiteboard by 30%~300%.
34. Support five fingers touching the screen at the same time, control menu includes: the equipment commonly used source switch, volume/all channel notation/home/return/counter/timer/voter.
35. Support Android application installation and data storage space with built-in virtual SD card, no need to connect external physical SD card.
36. Gadgets include timer/calculator/poll/welcome sign in/calendar, which can be quickly called out; all gadgets are designed with a floating window that can be moved anywhere on the screen.
37. Support U disk/local storage, audio/video/picture file open, support a variety of loop playing: single chip, list, single chip loop, list loop; Picture supports touch zoom/rotation/switch, video supports touch fast forward/fast back/screen ratio adjustment, audio supports to close the screen to listen to music.
38. If a signal is detected to be connected to the signal source channel, it will automatically connect to the signal source without manual switching.
39. In order to save energy, there is no signal and no operation under the channel and the operation interface. When the screen saver picture page appears at a fixed time, various screen saver opening times can be set: 5 minutes, 15 minutes, 30 minutes, 45 minutes and 60 minutes.
40. The board supports the function of wireless screen transmission from Android/apple mobile phone to large screen without installing apps, and Miracast/Airplay protocol is supported.
41. The board supports DLNA protocol, and it can transfer music, pictures, videos and other functions between mobile terminal and large screen terminal, as well as DMR/DMP functions.
42. The switch function can be customized through the clock module, and three groups of timing switch time can be set.
43. The system has administrator rights which allows to enter the advanced management state to control installation and uninstallation of applications. users can not arbitrarily access to the Windows system in order to prevent poisoning, system slowing down, information leakage, etc. (Windows support)

	<p>44. For convenience, the board has a built-in app store, which supports the downloading, installation of the third-party apps.</p> <p>45. Users can install the applications by himself, and the application's icon can be displayed in the list of programs.</p> <p>46. If the computer module fails, unplugging the computer can also work normally, including whiteboard/screen transfer/app store/gadget/switching signal source, etc. At the same time, the overall interaction is not affected and the experience is consistent.</p>
<p><b>Dongle HT002</b></p>	<p><b>V. wireless cast function parameters</b></p> <ol style="list-style-type: none"> <li>1. Standard USB interface, support 5.0g band transmission.</li> <li>2. Transmission delay≤65ms.</li> <li>3. Wireless transmission distance≥15m.</li> <li>4. Maximum 4 split screen supports 1080P*30Fps transmission.</li> <li>5. It can connect up to 16 Wireless Cast at the same time. Both Android system and Windows system can support wireless transmission full screen/half screen/three split screen/four split screen.</li> <li>6. Supports switch between split screen state and full screen state. Support return transmission of touch control under split screen state, with the delay of callback ≤15ms.</li> <li>7. Realize plication upgrade/firmware upgrade/wireless pairing by plug in Wireless Cast.</li> <li>8. Support transmits screens and sounds between IDB and PC/Mac OS by Wireless Cast. Supported operating systems: Windows 7/8/8.1/10, Mac OS X 10.8 and above.</li> <li>9. Compatible with the self-made ghost version of Windows system screen, compatible with the MAC installed Windows system screen.</li> <li>10. No need to external box or external antenna, can realize the wireless interaction between wireless cast and IDB.</li> <li>11. Support operating personal devices via conference tablet remotely.</li> <li>12. Support non-16:9 computer screen transfer, scale adjustment to full screen display.</li> <li>13. 72h long screen continuous line; Under the meeting scene, repeatedly plug and unplug, the computer and the screen treasure random combination, seize each other, also can work stably.</li> <li>14. Extremely fast response, prompt will pop up in 3 seconds after inserting the pass-through screen.</li> </ol>

	<p>15. Fluency mode: excel/word and other documents turn pages smoothly without blur, with zero mouse movement delay.</p> <p>16. Supports the selection of screen transfer content: only transfer window when transferring picture/select whether to transfer sound when transferring screen/whether to transfer mouse cursor when transferring screen。</p> <p>17. During Wireless screen transmission, the smart meeting tablet can surf the Internet through WIFI or wired at the same time, and the connected mobile phone can also realize Wireless Internet access at the same time.</p> <p>18. Mobile phone application scan code is connected to the device, scan code prompt jump downloads wireless screen app.</p> <p>19. The mobile phone screen transfer app supports smart camera, which can project the camera screen to the big screen in real time, and automatically upload pictures after taking pictures.</p> <p>20. Mobile phone screen transfer app supports intelligent remote control, which can be used to control the large screen interface by simulating the remote control on the mobile phone.</p> <p>21. Mobile phone screen transfer app supports multiple mobile phones to connect to the big screen, which can transmit the screen of the big screen to the mobile phone display in real time. The screen on the large screen changes, and the interface on the mobile phone changes synchronously.</p>
<p><b>Certification &amp; Honors</b></p>	<p>VI. For Interactive digital board, from the design, R&amp;D, production, quality, logistics and after-sales service are undertaken by manufacturer. Labeling and outsourcing of OEM products are prohibited, and the whole chain from the upstream materials to the end user can be traced back. The quality is strictly checked and the factory is subject to customer auditing.</p> <ol style="list-style-type: none"> <li>1. The CE, CB, ERP, CEC certificate of the bidding equipment must be provided.</li> <li>2. Product manufacturers have ISO9001 quality management system certification, ISO14001 environmental management system certification and occupational health management system certification.</li> </ol>

Shawn Kim  
Managing Director – Hisense B2B Europe



sep. 7. 2020