

Core Education Solution

BenQ Board Essential RE05A & RE05AC

With the core features of the Essential series, the RE05A and RE05AC interactive displays are built for deployment across multiple classrooms, cost-effectively and without IT complexity.



BenQ Education
Shape the Future of Learning

BenQ Board Essential

RE6505AC / RE7505AC / RE8605AC
RE6505A / RE7505A / RE8605A



Google EDLA Certified



Built-in AI Features



2 x 25W speakers

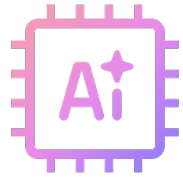
Advanced hardware meets intelligent software

** The following features are available on the RE05AC model.*



Google EDLA Certified

Android 16



6 TOPS NPU

On-device AI capability



Built-in AI features

Do-it-all teaching assistant



50 MP camera

Hi-resolution video
conferencing



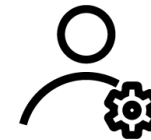
Rich 84W audio

2 x 12W speakers
2 x 30W subwoofers



8-mic array

Crystal-clear voice capture



Directory sync

Auto account setup



NFC sensor

Secure one-tap login

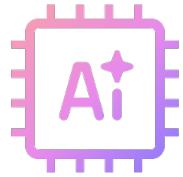
Advanced hardware meets intelligent software

** The following features are available on the RE05A model.*



Google EDLA Certified

Google Play support



6 TOPS NPU

Industry-leading AI



Built-in AI features

Do-it-all teaching assistant



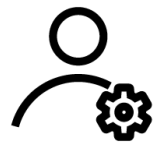
ClassroomCare

Germ-resistance & blue light protection



2 x 25W speakers

Rich, crisp sound



Directory sync

Auto account setup



Android 16

Newest version with future upgradeability



50 touchpoints

Multi-user collaboration

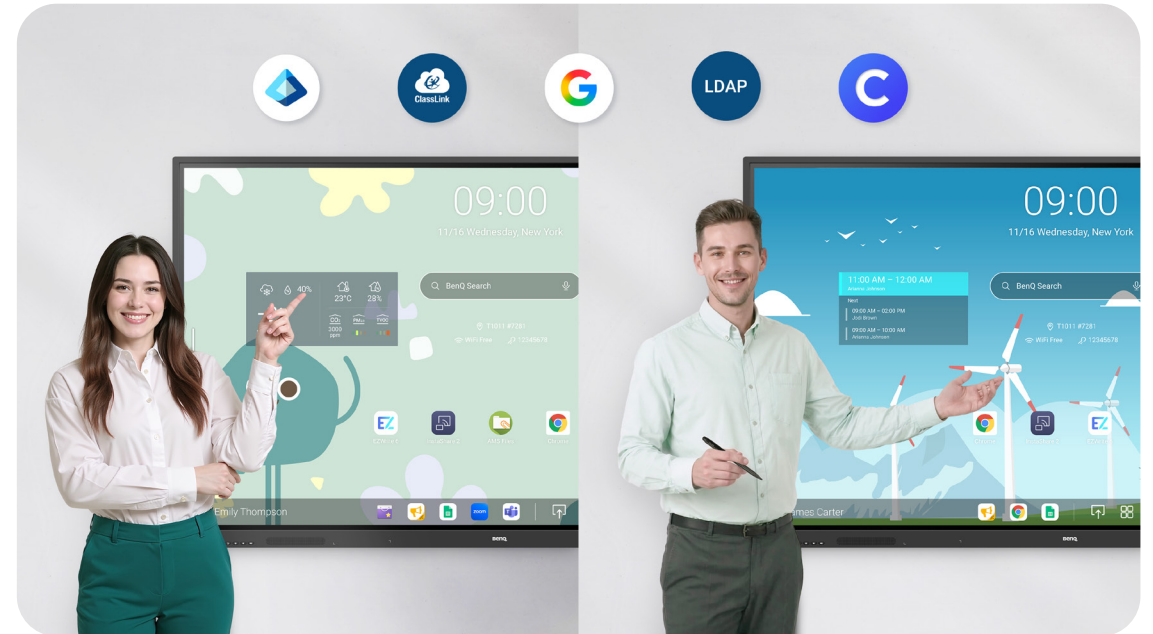
For IT efficiency and classroom ease

Less hassle for IT, secure logins for teachers. No manual account setup needed with directory sync. Import users from ClassLink, Clever, Google, Microsoft, and other identity providers and manage with ease.



Unified management from device to account

Device, app, and account management is easier than ever, significantly easing the burden on IT.



Secure workspace, wherever you teach

Log in with single sign-on (SSO) to access your personal workspace, complete with app shortcuts, wallpapers, and cloud storage.

BenQ AI: your do-everything teaching assistant



Ready for every classroom moment

Smart, convenient tools built into your interactive display to make teaching easier and lessons more engaging.



Ask AI

Get answers on the spot



Lasso Search

Circle, search, discover



Circle to Artify

From notes and sketches to art



AI Lessons

Your lesson planning assistant

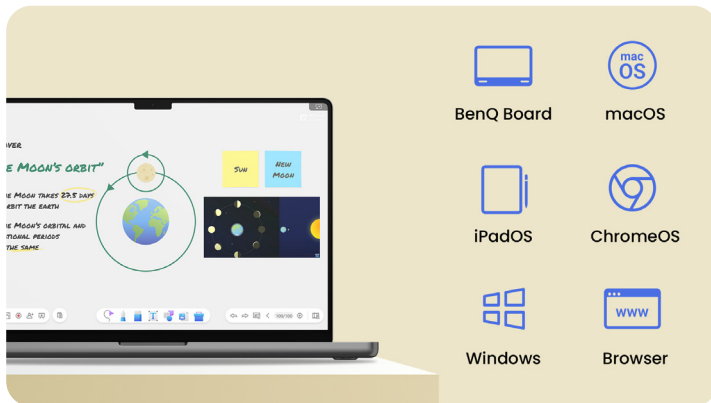


AI Quiz

Create a quiz in seconds

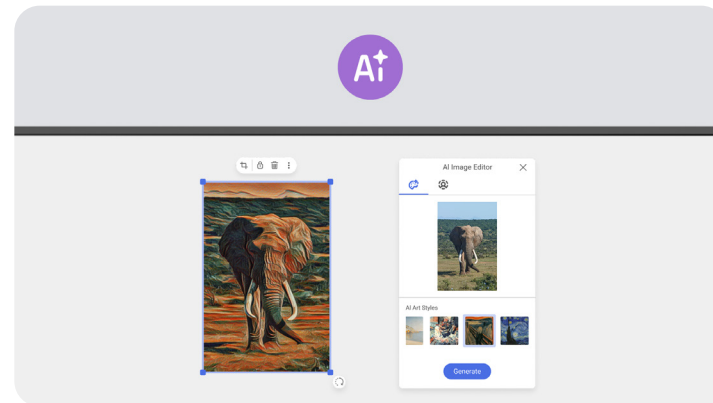
EZWrite 6: Beyond a whiteboard

Empowering teachers through every step, from lesson planning and classroom interaction to post-class review.



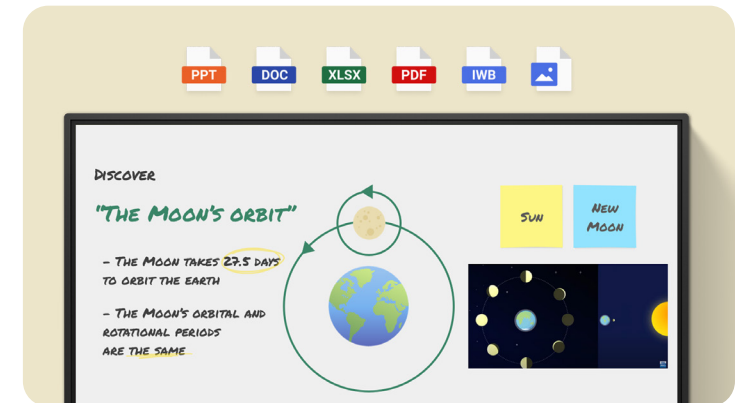
Create lessons anywhere

Prepare lessons using preferred platforms. EZWrite 6 works across laptops and mobile devices, supporting Windows, macOS, Android, and browsers.



Versatile teaching tool

Go beyond writing and sketching. Expand the whiteboard, split sections for group work, improve equation readability, and elevate visuals with AI-powered Background Remover and Art Style Transfer features.



Import, edit, and share

Easily incorporate content with support for diverse file formats, including Office files, PDFs, MP4s, and more. Add notes during class and save the session as an editable file or export it as a handout for review.

InstaShare 2: Wireless screen sharing

No cables, no adaptors, no setup delays. Walk in and transform lessons into shared experiences.



Improve lesson flow

The touchback feature lets teachers control their laptops directly from the board, eliminating the need to move back and forth during class. Less interruptions, more student focus.



The future of classroom interaction

Cast up to nine screens to foster a collaborative space where every student is inspired to share ideas. Teachers maintain control over which devices are mirrored and how many, who can annotate, and which screen-sharing mode is used.



Smooth casting from any device

Compatible with Windows, Android, ChromeOS, macOS, iOS, and iPadOS for a consistent experience across devices. Supports native protocols like AirPlay, Google Cast, and Miracast for effortless screen casting.

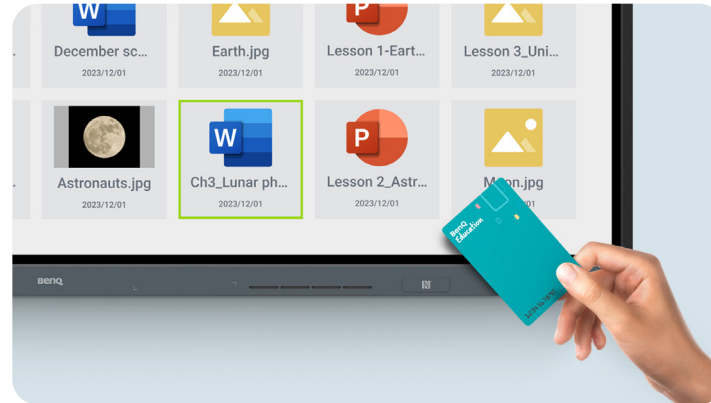
Designed with your students in mind

Built to support modern teaching methods and the changing needs of tomorrow's classrooms.



Next-level video conferencing

Enjoy exceptional video and audio with a built-in 50 MP camera. Features auto-framing, voice tracking, up to 12 meters of microphone pickup, and a privacy cover.



Tap and teach

Save time with one-tap NFC login. Securely access your personal workspace on your BenQ Board.



Vibrant 84W audio

Fill the classroom with rich, immersive sound. Dual 12W speakers and dual 30W subwoofers deliver crystal-clear audio and deep, resonant bass.

** The above features are available only on the RE05AC model.*

For different classrooms and teaching styles

Providing the flexibility needed for the unique demands of students and learning environments.



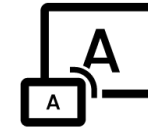
Ink freely

Add notes and highlight on top of any app, document, or screen



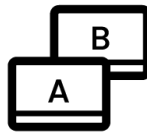
Side-by-side drag and drop

Easily move content between Chrome and EZWrite



Go big

Display-to-projector mirroring for larger environments



Workspace doubled

More space with screen extension



Max compatibility

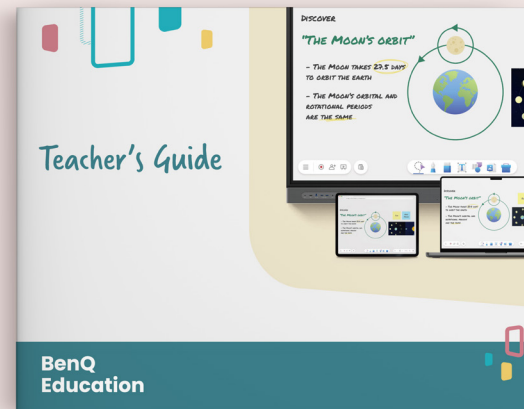
Support Android, Windows, MacOS, ChromeOS, and more

Easy to get started

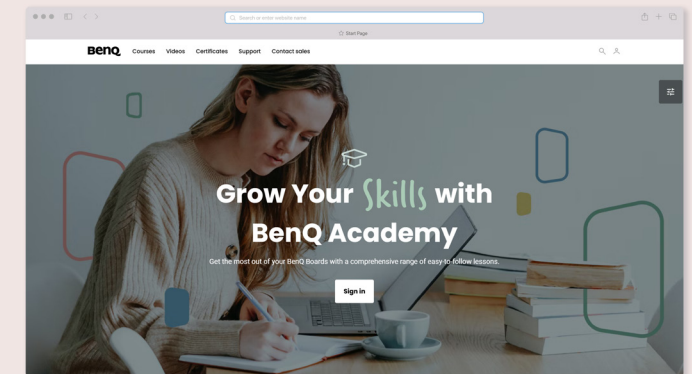
BenQ Boards are designed for effortless adoption. Teachers and IT teams have access to a variety of resources to help them make the most of the interactive display experience.



Onboarding guides



Teacher's guides



BenQ Academy

Attendance builds achievement

BenQ ClassroomCare® offers numerous protective features to ensure a safe environment for learning interactions.



Student health comes first



Eye-comfort display

Advanced blue light protection



Anti-glare, flicker-free

Reduced eye strain and enhanced visual quality



Germ-resistant

Effective against 99.9% of common germs—TUV certified

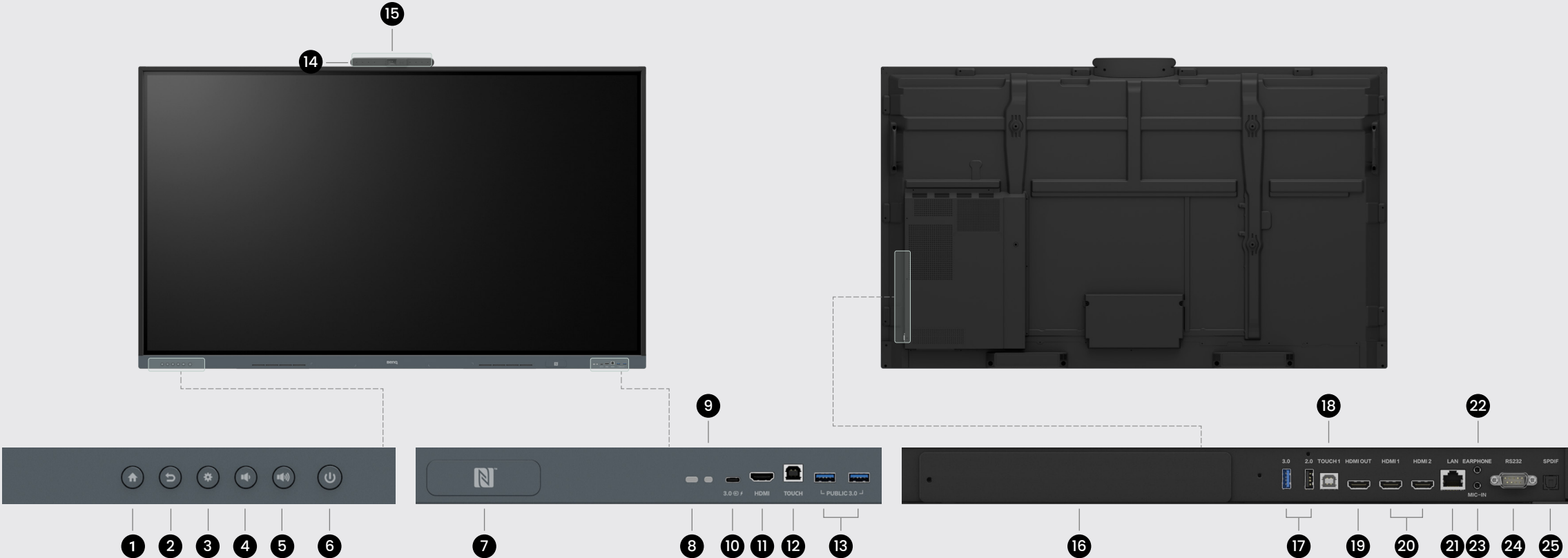
RE05AC device specifications



Dimensions (W × H × D)

- RE6505AC| 58.7 × 36.5 × 3.9 in (1491.1 × 927.8 × 101 mm)
- RE7505AC| 67.4 × 41.4 × 3.9 in (1711.3 × 1051.2 × 101 mm)
- RE8605AC| 77.2 x 46.9 x 3.9 in (1960.2 × 1191.2 × 100.5 mm)

RE05AC device specifications



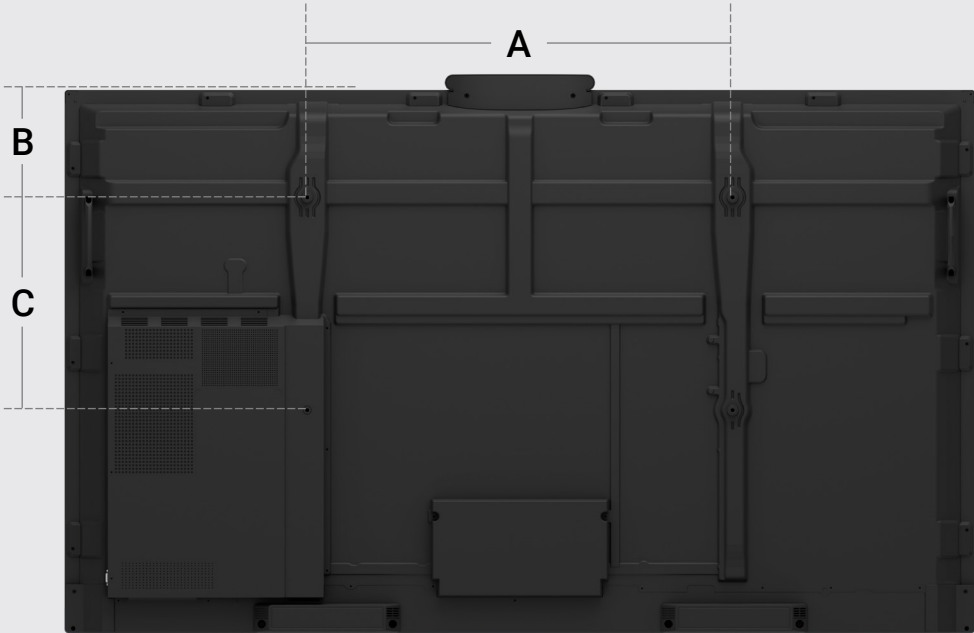
- 1. Home button
- 2. Back button
- 3. Settings button
- 4. Volume down button
- 5. Volume up button
- 6. Power button
- 7. NFC sensor

- 8. IR sensor
- 9. Ambient light sensor
- 10. USB 3.0 Type-C port
- 11. HDMI in port
- 12. Touch USB 2.0 Type-B port
- 13. USB 3.0 Type-A ports
- 14. 8-microphone array
- 15. 4K camera

- 16. OPS slot with cover
- 17. USB 3.0 & USB 2.0 Type-A ports
- 18. Touch USB 2.0 Type-B port 1
- 19. HDMI out port
- 20. HDMI in ports²

- 21. Gigabit Ethernet port
- 22. 3.5 mm audio out jack
- 23. 3.5 mm audio in jack
- 24. RS232 port
- 25. S/PDIF port

RE05AC VESA specifications



Dimension	65"	75"	86"
A	23.6 in (600 mm)	31.5 in (800 mm)	31.5 in (800 mm)
B	8.8 in (222.8 mm)	8 in (202 mm)	11.4 in (289.8 mm)
C	15.7 in (400 mm)	15.7 in (400 mm)	23.6 in (600 mm)

RE05A device specifications



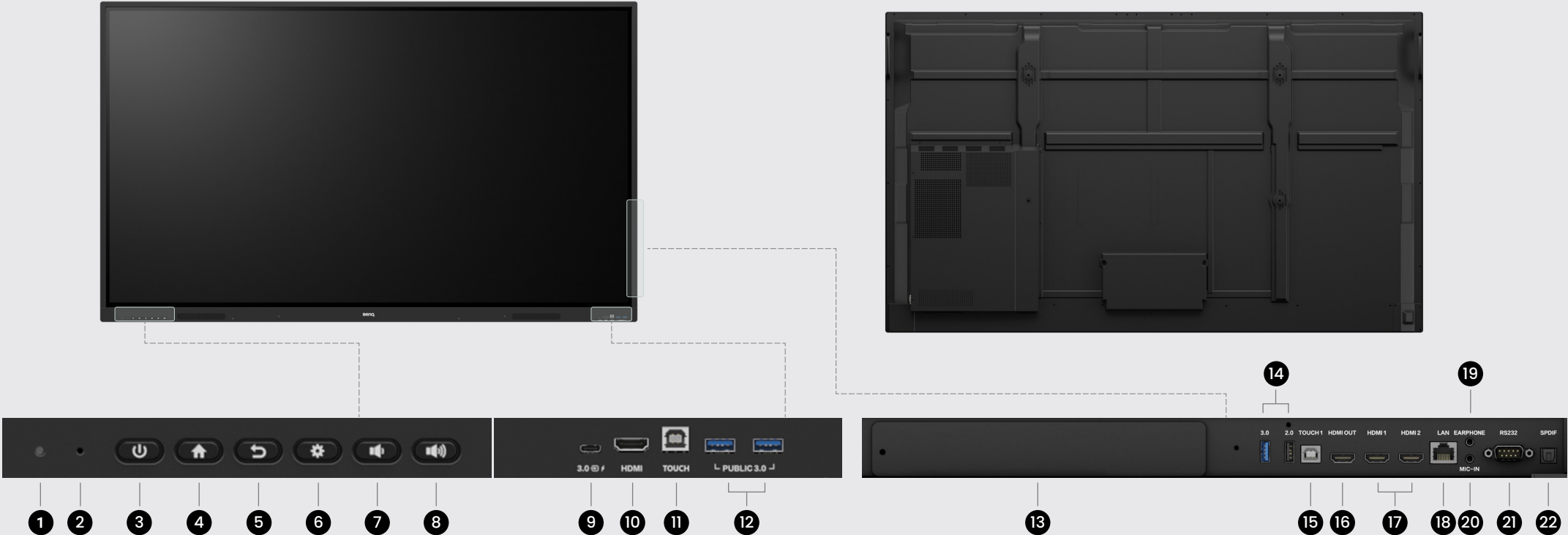
Dimensions (W × H × D)

RE6505A| 58.7 × 35.4 × 3.9 in (1491 × 898.5 × 97.9 mm)

RE7505A| 67.4 × 40.2 × 3.9 in (1712 × 1022 × 98.4 mm)

RE8605A| 77.0 × 45.7 × 3.8 in (1957 × 1159.9 × 97.1 mm)

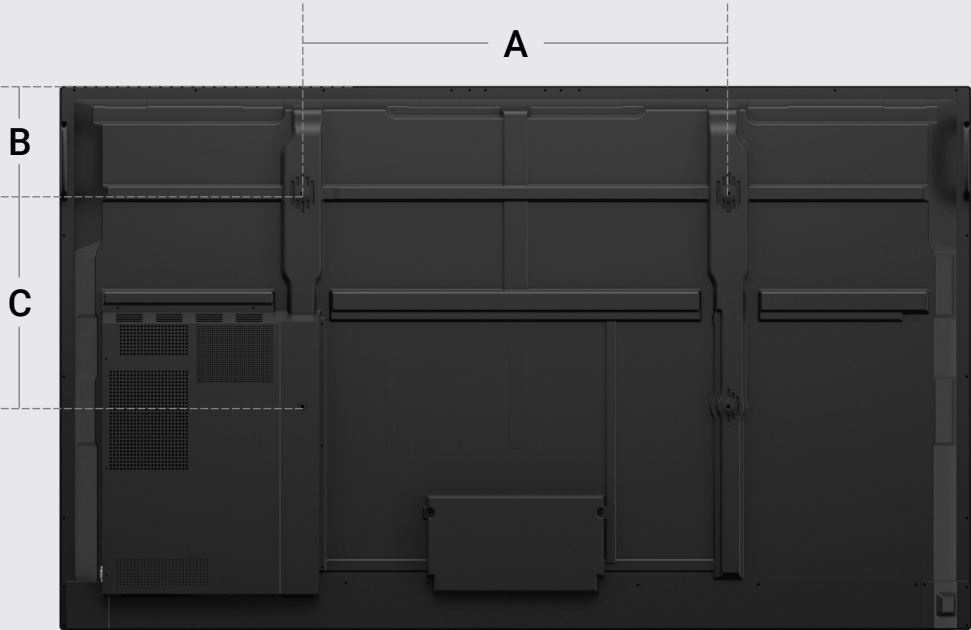
RE05A device specifications



- 1. IR sensor
- 2. Ambient light sensor
- 3. Power button
- 4. Home button
- 5. Back button
- 6. Settings button
- 7. Volume down button
- 8. Volume up button
- 9. USB 3.0 Type-C port
- 10. HDMI in port
- 11. Touch USB 2.0 Type-B port
- 12. USB 3.0 Type-A ports

- 13. OPS slot with cover
- 14. USB 3.0 & USB 2.0 Type-A ports
- 15. Touch USB 2.0 Type-B port
- 16. HDMI out port
- 17. HDMI in ports
- 18. Gigabit Ethernet port
- 19. 3.5 mm audio out jack
- 20. 3.5 mm audio in jack
- 21. RS232 port
- 22. S/PDIF port

RE05A VESA specifications



Dimension	65"	75"	86"
A	23.6 in (600 mm)	31.5 in (800 mm)	31.5 in (800 mm)
B	8.8 in (222.7 mm)	7.9 in (201.8 mm)	11.4 in (288.8 mm)
C	15.7 in (400 mm)	15.7 in (400 mm)	23.6 in (600 mm)

Model	RE6505AC	RE7505AC	RE8605AC
Display			
Screen size	65"	75"	86"
Panel type	VA	VA	VA
Resolution	4K UHD 3840 × 2160 pixels	4K UHD 3840 × 2160 pixels	4K UHD 3840 × 2160 pixels
Active area	56.2 × 31.6 inch (1428.5 × 803.5 mm)	64.9 × 36.5 inch (1650.2 × 928.3 mm)	74.4 × 42.0 inch (1895.0 × 1066.0 mm)
Aspect ratio	16:9	16:9	16:9
Panel brightness (typical)	500 nits	500 nits	500 nits
Color depth	10-bit	10-bit	10-bit
Color gamut	72% NTSC	72% NTSC	72% NTSC
Contrast ratio (typical)	5500:1	5500:1	5500:1
Dynamic contrast ratio	50,000:1	50,000:1	50,000:1
Response time	6.5 ms	6.5 ms	6.5 ms
Flicker-free	Yes	Yes	Yes
Low blue light	Yes	Yes	Yes
Anti-glare	Yes	Yes	Yes
Germ-resistant technology	Availability dependent on region	Availability dependent on region	Availability dependent on region
Hardness	9H tempered	9H tempered	9H tempered
Backlight life (typical)	50,000 hrs	50,000 hrs	50,000 hrs
Touch technology			
Touch points	Up to 50	Up to 50	Up to 50
Touch response time	< 5 ms	< 5 ms	< 5 ms
Touch technology	Precision IR	Precision IR	Precision IR

Model	RE6505AC	RE7505AC	RE8605AC
System			
CPU	Arm Cortex-A72 × 4 + Cortex-A53 × 4	Arm Cortex-A72 × 4 + Cortex-A53 × 4	Arm Cortex-A72 × 4 + Cortex-A53 × 4
NPU	6 TOPS	6 TOPS	6 TOPS
GPU	Arm Mali-G52 MC3	Arm Mali-G52 MC3	Arm Mali-G52 MC3
Memory Storage	8 GB 128 GB	8 GB 128 GB	8 GB 128 GB
Operating system	Android 16 (EDLA)	Android 16 (EDLA)	Android 16 (EDLA)
Connectivity			
USB-C	1 × USB 3.0 (PD 65 W)	1 × USB 3.0 (PD 65 W)	1 × USB 3.0 (PD 65 W)
USB-C out	N/A	N/A	N/A
USB-A	1 × USB 2.0 + 3 × USB 3.0	1 × USB 2.0 + 3 × USB 3.0	1 × USB 2.0 + 3 × USB 3.0
USB-B (touch)	2 × USB 2.0	2 × USB 2.0	2 × USB 2.0
HDMI (in out)	3 × HDMI 2.0 1 × HDMI 2.0	3 × HDMI 2.0 1 × HDMI 2.0	3 × HDMI 2.0 1 × HDMI 2.0
DisplayPort	N/A	N/A	N/A
VGA	N/A	N/A	N/A
Audio in	1 × 3.5 mm audio jack	1 × 3.5 mm audio jack	1 × 3.5 mm audio jack
Audio out	1 × earphone jack	1 × earphone jack	1 × earphone jack
S/PDIF out	1 (optical)	1 (optical)	1 (optical)
Ethernet	1 × Gigabit (Android)	1 × Gigabit (Android)	1 × Gigabit (Android)
Wi-Fi	Wi-Fi 6 (Option)	Wi-Fi 6 (Option)	Wi-Fi 6 (Option)
Bluetooth®	Bluetooth 5.2 (Option)	Bluetooth 5.2 (Option)	Bluetooth 5.2 (Option)
OPS slot (for slot-in PC)	1	1	1
microSD reader	N/A	N/A	N/A
RS-232	1	1	1

Model	RE6505AC	RE7505AC	RE8605AC
Built-in peripherals			
Soundbar	84W (2 × 12W speakers 2 × 30W subwoofer)	84W (2 × 12W speakers 2 × 30W subwoofer)	84W (2 × 12W speakers 2 × 30W subwoofer)
Microphone	8-microphone array (up to 39 ft 12m)	8-microphone array (up to 39 ft 12m)	8-microphone array (up to 39 ft 12m)
NFC sensor	Yes	Yes	Yes
Air ionizer	N/A	N/A	N/A
Air quality sensor	N/A	N/A	N/A
Ambient light sensor	Yes	Yes	Yes
IR sensor	Yes	Yes	Yes
Camera	50 MP	50 MP	50 MP
Software			
Whiteboarding	EZWrite 6.0	EZWrite 6.0	EZWrite 6.0
Wireless screen sharing	InstaShare 2	InstaShare 2	InstaShare 2
Account management	AMS	AMS	AMS
Device management	DMS	DMS	DMS
Broadcast system	X-Sign Broadcast	X-Sign Broadcast	X-Sign Broadcast
Quick access tool	Floating tool	Floating tool	Floating tool
Power			
ENERGY STAR®	Yes	Yes	Yes
Power	AC 100-240V 50/60 Hz	AC 100-240V 50/60 Hz	AC 100-240V 50/60 Hz
Standby power consumption	<0.5W	<0.5W	<0.5W
Typical power consumption	75.8 W	82.7 W	115.2 W

Model	RE6505AC	RE7505AC	RE8605AC
Accessories			
Cables	1 × HDMI (9.8 ft 3 m), 1 × USB-B touch (9.8 ft 3 m)	1 × HDMI (9.8 ft 3 m), 1 × USB-B touch (9.8 ft 3 m)	1 × HDMI (9.8 ft 3 m), 1 × USB-B touch (9.8 ft 3 m)
Wall mount	1	1	1
Pens	2	2	2
Remote control	1	1	1
Physical			
Dimensions (W × H × D)	58.7 × 36.5 × 3.9 inch (1491.1 × 927.8 × 101 mm)	67.4 × 41.4 × 3.9 inch (1711.3 × 1051.2 × 101 mm)	77.2 × 46.9 × 3.9 inch (1960.2 × 1191.2 × 100.5 mm)
Shipping dimensions (W × H × D)	64.1 × 39.9 × 7.3 inch (1628 × 1014 × 185 mm)	73.3 × 44.9 × 7.3 inch (1863 × 1140 × 185 mm)	83.1 × 50.8 × 7.3 inch (2110 × 1291 × 185 mm)
Weight (product shipping)	64.3 lbs 82.5 lbs (29.2 kg 37.4 kg)	88.1 lbs 114.9 lbs (39.9 kg 52.1 kg)	124.5 lbs 144.4 lbs (56.5 kg 65.5 kg)
Mount interface Screws	VESA 600 × 400 mm 4 × M8 × 25L	VESA 800 × 400 mm 4 × M8 × 25L	VESA 800 × 600 mm 4 × M8 × 25L
Pen tray	N/A	N/A	N/A
Environment			
Operating humidity	20% - 80% RH non-condensing	20% - 80% RH non-condensing	20% - 80% RH non-condensing
Operating temperature	32°F - 104°F 0°C - 40°C	32°F - 104°F 0°C - 40°C	32°F - 104°F 0°C - 40°C
Storage humidity	10% - 90% RH non-condensing	10% - 90% RH non-condensing	10% - 90% RH non-condensing
Storage temperature	-10°C ~ 60°C 14°F ~ 140°F	-10°C ~ 60°C 14°F ~ 140°F	-10°C ~ 60°C 14°F ~ 140°F

Model	RE6505A	RE7505A	RE8605A
Display			
Screen size	65"	75"	86"
Panel type	VA	VA	VA
Resolution	4K UHD 3840 × 2160 pixels	4K UHD 3840 × 2160 pixels	4K UHD 3840 × 2160 pixels
Active area	56.2 × 31.6 inch (1428.5 × 803.5 mm)	64.9 × 36.5 inch (1650.2 × 928.2 mm)	74.4 × 42.0 inch (1895.0 × 1066.0 mm)
Aspect ratio	16:9	16:9	16:9
Panel brightness (typical)	450 nits	450 nits	450 nits
Color depth	10-bit	10-bit	10-bit
Color gamut	72% NTSC	72% NTSC	72% NTSC
Contrast ratio (typical)	5500:1	5500:1	5500:1
Dynamic contrast ratio	50,000:1	50,000:1	50,000:1
Response time	6.5 ms	6.5 ms	6.5 ms
Flicker-free	Yes	Yes	Yes
Low blue light	Yes	Yes	Yes
Anti-glare	Yes	Yes	Yes
Germ-resistant technology	Availability dependent on region	Availability dependent on region	Availability dependent on region
Hardness	9H tempered	9H tempered	9H tempered
Backlight life (typical)	50,000 hrs	50,000 hrs	50,000 hrs
Touch technology			
Touch points	Up to 50	Up to 50	Up to 50
Touch response time	< 5 ms	< 5 ms	< 5 ms
Touch technology	Precision IR	Precision IR	Precision IR

Model	RE6505A	RE7505A	RE8605A
System			
CPU	Arm Cortex-A72 × 4 + Cortex-A53 × 4	Arm Cortex-A72 × 4 + Cortex-A53 × 4	Arm Cortex-A72 × 4 + Cortex-A53 × 4
NPU	6 TOPS	6 TOPS	6 TOPS
GPU	Arm Mali-G52 MC3	Arm Mali-G52 MC3	Arm Mali-G52 MC3
Memory Storage	8 GB 128 GB	8 GB 128 GB	8 GB 128 GB
Operating system	Android 16 (EDLA)	Android 16 (EDLA)	Android 16 (EDLA)
Connectivity			
USB-C	1 × USB 3.0 (PD 65 W)	1 × USB 3.0 (PD 65 W)	1 × USB 3.0 (PD 65 W)
USB-C out	N/A	N/A	N/A
USB-A	1 × USB 2.0 + 3 × USB 3.0	1 × USB 2.0 + 3 × USB 3.0	1 × USB 2.0 + 3 × USB 3.0
USB-B (touch)	2 × USB 2.0	2 × USB 2.0	2 × USB 2.0
HDMI (in out)	3 × HDMI 2.0 1 × HDMI 2.0	3 × HDMI 2.0 1 × HDMI 2.0	3 × HDMI 2.0 1 × HDMI 2.0
DisplayPort	N/A	N/A	N/A
VGA	N/A	N/A	N/A
Audio in	1 × 3.5 mm microphone jack	1 × 3.5 mm microphone jack	1 × 3.5 mm microphone jack
Audio out	1 × earphone jack	1 × earphone jack	1 × earphone jack
S/PDIF out	1 (optical)	1 (optical)	1 (optical)
Ethernet	1 × Gigabit (Android)	1 × Gigabit (Android)	1 × Gigabit (Android)
Wi-Fi	Wi-Fi 6 (Option)	N/A	N/A
Bluetooth®	Bluetooth 5.2 (Option)	N/A	N/A
OPS slot (for slot-in PC)	1	1	1
microSD reader	N/A	N/A	N/A
RS-232	1	1	1

Model	RE6505A	RE7505A	RE8605A
Built-in peripherals			
Soundbar	2 × 25 W	2 × 25 W	2 × 25 W
Microphone	N/A	N/A	N/A
NFC sensor	N/A	N/A	N/A
Air ionizer	N/A	N/A	N/A
Air quality sensor	N/A	N/A	N/A
Ambient light sensor	Yes	Yes	Yes
IR sensor	Yes	Yes	Yes
Software			
Whiteboarding	EZWrite 6.0	EZWrite 6.0	EZWrite 6.0
Wireless screen sharing	Instashare 2	Instashare 2	Instashare 2
Account management	AMS	AMS	AMS
Device management	DMS	DMS	DMS
Broadcast system	X-Sign Broadcast	X-Sign Broadcast	X-Sign Broadcast
Quick access tool	Floating tool	Floating tool	Floating tool
Power			
ENERGY STAR®	Yes	Yes	Yes
Power	AC 100-240V 50/60 Hz	AC 100-240V 50/60 Hz	AC 100-240V 50/60 Hz
Standby power consumption	<0.5W	<0.5W	<0.5W
Typical power consumption	65.9W	71.9W	100.2W

Model	RE6505A	RE7505A	RE8605A
Accessories			
Cables	1 × HDMI (9.8 ft 3 m), 1 × USB-B touch (9.8 ft 3 m)	1 × HDMI (9.8 ft 3 m), 1 × USB-B touch (9.8 ft 3 m)	1 × HDMI (9.8 ft 3 m), 1 × USB-B touch (9.8 ft 3 m)
Wall mount	1	1	1
Pens	2	2	2
Remote control	1	1	1
Physical			
Dimensions (W × H × D)	58.7 × 35.4 × 3.9 inch (1491 × 898.5 × 97.9 mm)	67.4 × 40.2 × 3.9 inch (1712 × 1022 × 98.4 mm)	77.0 × 45.7 × 3.8 inch (1957 × 1159.9 × 97.1 mm)
Shipping dimensions (W × H × D)	64.1 × 39.9 × 7.3 inch (1628 × 1014 × 185 mm)	73.3 × 44.9 × 7.3 inch (1863 × 1140 × 185 mm)	83.1 × 50.8 × 7.3 inch (2110 × 1291 × 185 mm)
Weight (product shipping)	66.1 lbs 82.9 lbs (30.0 kg 37.6 kg)	89.1 lbs 113.8 lbs (40.4 kg 51.6 kg)	109.1 lbs 138.9 lbs (49.5 kg 63.0 kg)
Mount interface Screws	VESA 600 × 400 mm 4 × M8 × 25L	VESA 800 × 400 mm 4 × M8 × 25L	VESA 800 × 600 mm 4 × M8 × 25L
Pen tray	N/A	N/A	N/A
Environment			
Operating humidity	20% - 80% RH non-condensing	20% - 80% RH non-condensing	20% - 80% RH non-condensing
Operating temperature	32°F - 104°F 0°C - 40°C	32°F - 104°F 0°C - 40°C	32°F - 104°F 0°C - 40°C
Storage humidity	10% - 90% RH non-condensing	10% - 90% RH non-condensing	10% - 90% RH non-condensing
Storage temperature	-10°C ~ 60°C 14°F ~ 140°F	-10°C ~ 60°C 14°F ~ 140°F	-10°C ~ 60°C 14°F ~ 140°F



Dealer's Stamp