



# *banana board*

Datasheet 65 / 75 / 86

**GEN2**



# banana board

The Es-BB Series is an affordable, feature rich interactive display that just simply works. It provides an easy to use, 20 point touch HD interactive touchscreen experience, suitable for Education, Business and Corporate users who want the essential features,

## Features

### CONNECTIVITY

Easily connect other devices in the room to the Es Series - HDMI, VGA, USB Ports & RS232 connectivity is provided. The Intellitouch display makes it super easy to select the input source you want.

### IR TOUCH TECHNOLOGY

Use either the supplied pens for greater accuracy, or draw multiple lines simultaneously using your hand - it's never been easier to create or annotate.

### FREEZE FRAME

When you connect a laptop, you can use the Freeze Frame to freeze displayed content on your screen for others whilst you can carry on working from your laptop.

### SAVE MONEY

Savings in running costs: a 65" Es Series uses 300 watts on average - a typical projector system uses 1010 watts. Plus save on bulb replacement and an unsurpassed life cycle.



### TOUGH & SCRATCH RESISTANT

Designed to withstand excessive use - The AG 4mm Tempered glass is built to last!

### ANTI-GLARE

Watch and read screen content with exceptional clarity in daylight without reflection and glare - no need to darken the room. Crystal clear text and images reduce eye strain and keep the room engaged with your content.

### RJ45 PORT

Connect direct to the Internet with the included RJ45 Port.

### CLUTTER-FREE FRONT

With 2 ports on the front we've made it easier to connect wireless dongles or storage utilising superfast USB 3.0 connectivity.



#### PC MODULE

For an all in one solution, add an integrated PC module



#### 20 POINT TOUCH

Utilise the multiple simultaneous writing points or use with multiple users



#### INTEGRATED SPEAKERS

Two 10W speakers are integrated in the bottom loudspeaker



#### NO CALIBRATION

Our displays are ready to go straight out of the box



#### 4K UHD

As with all our displays enjoy 4K UHD for a crisper sharper image

### COMPATIBLE WITH



Connect your own Laptop, PC or Mac and use your own software on the big screen.



Along with a purchase of an Es-BB, you'll gain access to Nuc. This digital whiteboarding software lets you draw and create using dozens of different tools and a library of pre-made assets to choose from. Drag and drop images, video and audio seamlessly onto your workspace. Open your documents, powerpoints, spreadsheets and PDFs, all in one software package.

To find out more about NUC, head over to [www.discoveribt.com/nuc](http://www.discoveribt.com/nuc)



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## Specifications

### DISPLAY

<b>Size (Inches)</b>	65
<b>Aspect Ratio</b>	16:9
<b>Resolution</b>	3840(H) x 2160(V)
<b>Backlight type</b>	DLED
<b>Refreshing Frequency</b>	60Hz
<b>Display Colour</b>	1.07B (10bit)
<b>Display Area</b>	1428.48 (H)×803.52(V)mm
<b>Pixel Pitch</b>	0.372×0.372mm
<b>Response Time</b>	8ms
<b>Contrast Ratio</b>	1200:1
<b>Viewing Angle</b>	178°(H/V)
<b>Lifetime</b>	≥30000 Hours
<b>Brightness with Glass (typ)</b>	300 cd/m <sup>2</sup>
<b>Brightness with Glass (min)</b>	350 cd/m <sup>2</sup>

### TOUCH SYSTEM

<b>Sensing Type</b>	Infrared Recognition
<b>Touch Point</b>	20 Points Touch
<b>Touch Tool</b>	Finger, Passive Infrared Pen
<b>Minimum Object Size</b>	3mm
<b>Response Time</b>	≤10ms
<b>Accuracy</b>	±2mm
<b>Writing Height</b>	≤3mm
<b>Touch Drive</b>	Free Drive
<b>Communication Mode</b>	Full-Speed USB
<b>Interpolation Resolution</b>	32767(W) x 32767(D)

### I/O PORT

<b>HDMI IN</b>	3	<b>HDMI OUT</b>	1	<b>TOUCH 2.0</b>	3
<b>USB 2.0</b>	3	<b>USB 3.0</b>	3	<b>TOUCH OUT</b>	-
<b>VGA IN</b>	1	<b>SPDIF</b>	1	<b>LAN (RJ45)</b>	1
<b>AUDIO IN</b>	1	<b>AUDIO OUT</b>	1	<b>RS232</b>	1
<b>FRONT PHYSICAL KEYS</b>				1	



### AUDIO

<b>Sound Channel</b>	2.0
<b>Output Power</b>	2 x 10W

### ANDROID SYSTEM

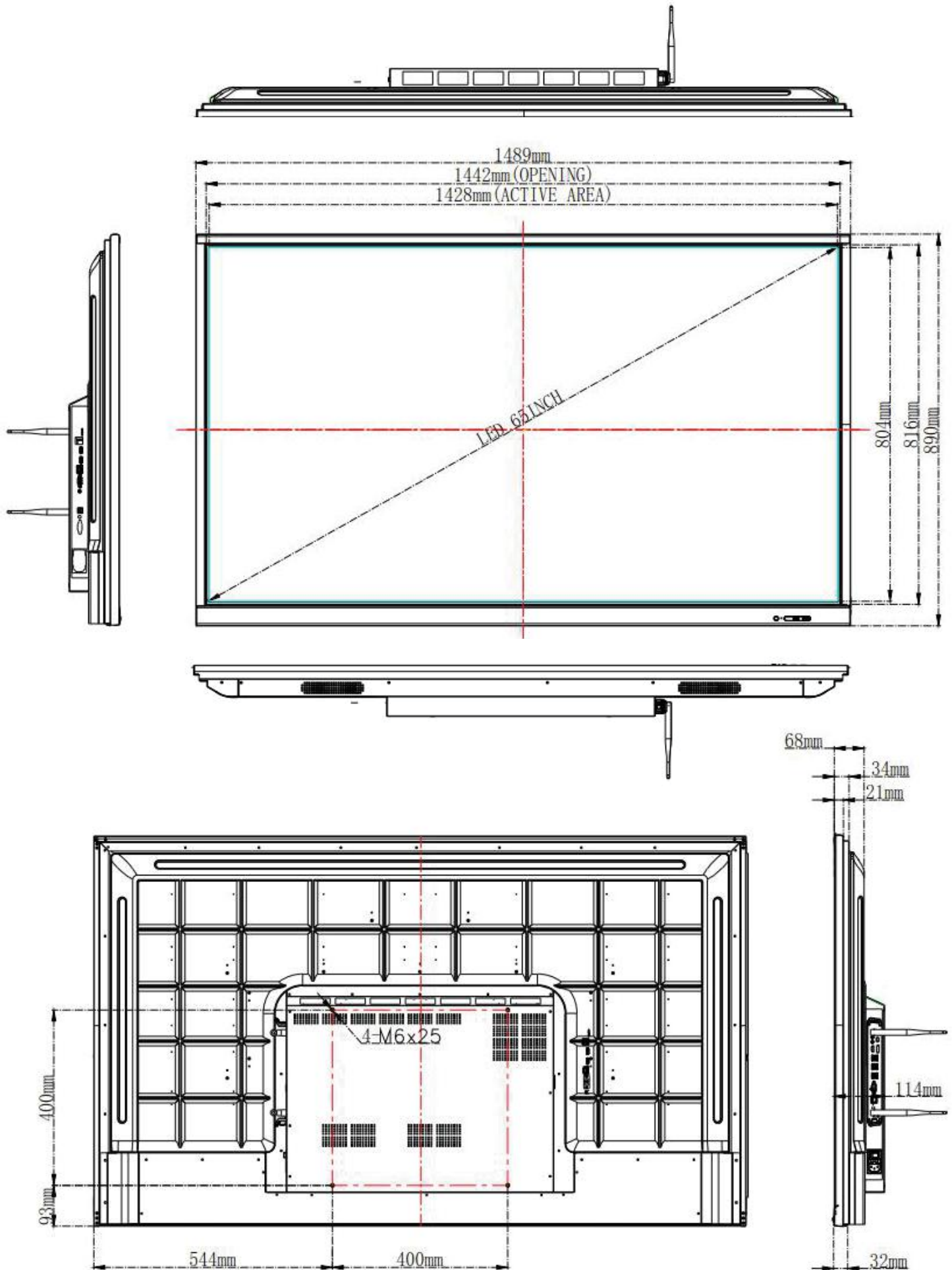
<b>System Version</b>	Android 8.0	<b>Optional PC Module Available</b> Models: SI01
<b>CPU</b>	A73 x2 + A53 x2	
<b>GPU</b>	Mali G51 x2	
<b>RAM</b>	2GB	
<b>ROM</b>	16GB	

### POWER

<b>Power Requirements</b>	100-240V~ 50/60Hz 3.0A
<b>Overall Power</b>	300W
<b>Standby Power</b>	≤0.5W

### PHYSICAL SPECIFICATIONS

<b>Dimensions LxHxD</b>	1489×897×87mm
<b>Dimensions (Package) LxHxD</b>	1628×208×1005mm
<b>Thickness of Machine &amp; Wall Mount</b>	117mm (WIB9060G)
<b>Wall-Hanging Screw Spec</b>	M8×25mm
<b>VESA</b>	600 x 400mm
<b>Net Weight</b>	38.75KG
<b>Gross Weight</b>	48.5KG



## Specifications

### DISPLAY

<b>Size (Inches)</b>	75
<b>Aspect Ratio</b>	16:9
<b>Resolution</b>	3840(H) x 2160(V)
<b>Backlight type</b>	DLED
<b>Refreshing Frequency</b>	60Hz
<b>Display Colour</b>	1.07B (10bit)
<b>Display Area</b>	1649.664 (H)×927.936(V) mm
<b>Pixel Pitch</b>	0.4296×0.4296mm
<b>Response Time</b>	8ms
<b>Contrast Ratio</b>	1200:1
<b>Viewing Angle</b>	178°(H/V)
<b>Lifetime</b>	≥30000 Hours
<b>Brightness with Glass (typ)</b>	300 cd/m2
<b>Brightness with Glass (min)</b>	350 cd/m2

### TOUCH SYSTEM

<b>Sensing Type</b>	Infrared Recognition
<b>Touch Point</b>	20 Points Touch
<b>Touch Tool</b>	Finger, Passive Infrared Pen
<b>Minimum Object Size</b>	3mm
<b>Response Time</b>	≤10ms
<b>Accuracy</b>	±2mm
<b>Writing Height</b>	≤3mm
<b>Touch Drive</b>	Free Drive
<b>Communication Mode</b>	Full-Speed USB
<b>Interpolation Resolution</b>	32768(W) x 32768(D)

### I/O PORT

<b>HDMI IN</b>	3	<b>HDMI OUT</b>	1	<b>TOUCH 2.0</b>	-
<b>USB 2.0</b>	3	<b>USB 3.0</b>	3	<b>TOUCH OUT</b>	2
<b>VGA IN</b>	1	<b>SPDIF</b>	1	<b>LAN (RJ45)</b>	1
<b>AUDIO IN</b>	1	<b>AUDIO OUT</b>	1	<b>RS232</b>	1
<b>FRONT PHYSICAL KEYS</b>					1



### AUDIO

<b>Sound Channel</b>	2.0
<b>Output Power</b>	2 x 10W

### ANDROID SYSTEM

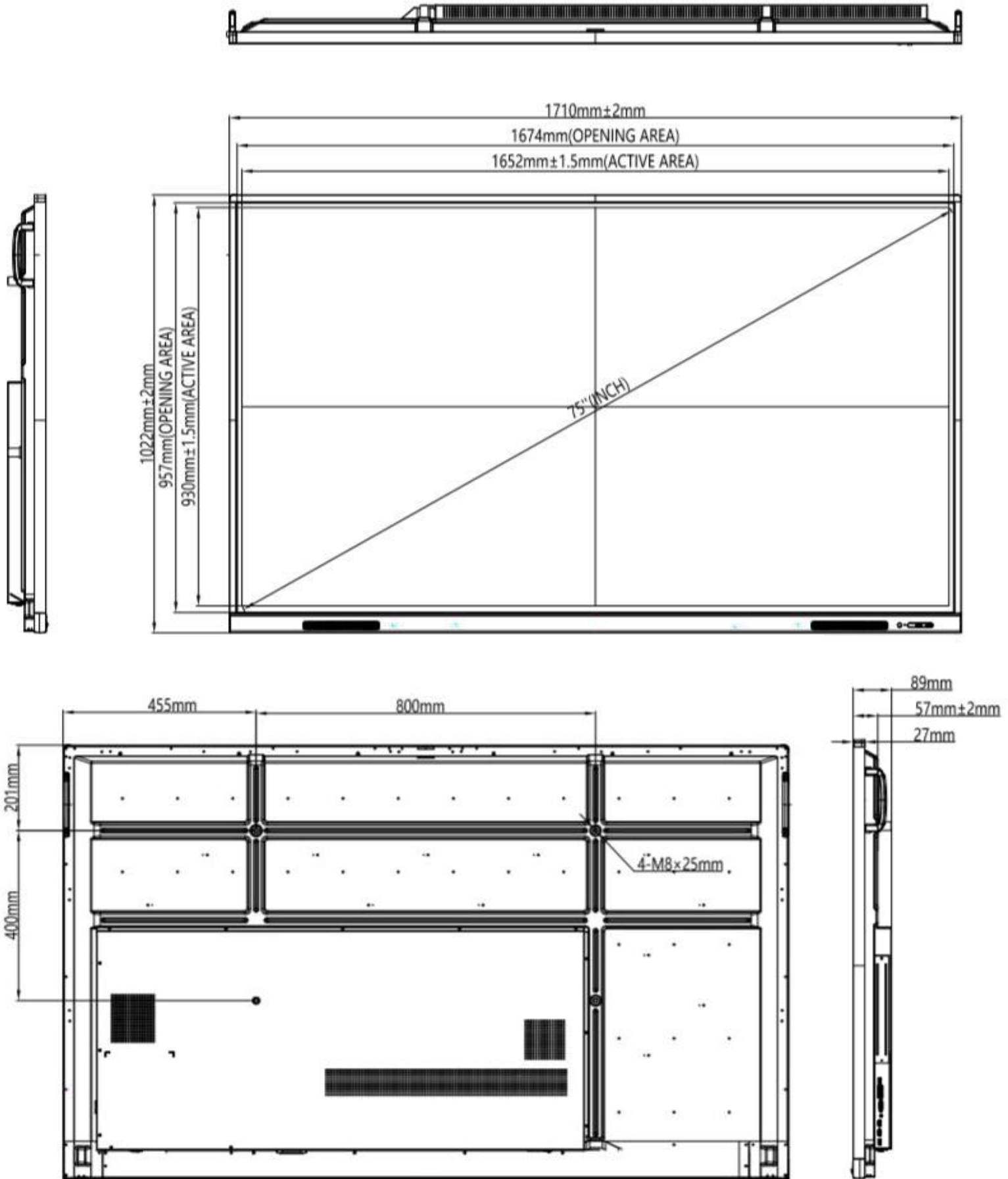
<b>System Version</b>	Android 8.0	<b>Optional PC Module Available</b> Models: SI01 / OPS42A
<b>CPU</b>	A73 x2 + A53 x2	
<b>GPU</b>	Mali G51 x2	
<b>RAM</b>	2GB	
<b>ROM</b>	16GB	

### POWER

<b>Power Requirements</b>	100-240V~ 50/60Hz 3.5A
<b>Overall Power</b>	350W
<b>Standby Power</b>	≤0.5W

### PHYSICAL SPECIFICATIONS

<b>Dimensions LxHxD</b>	1709×1019×87mm
<b>Dimensions (Package) LxHxD</b>	1860×280×1140mm
<b>Thickness of Machine &amp; Wall Mount</b>	117mm (WIB9060G)
<b>Wall-Hanging Screw Spec</b>	M8×25mm
<b>VESA</b>	800 x 400mm
<b>Net Weight</b>	53.05KG
<b>Gross Weight</b>	69.85KG





## Specifications

### DISPLAY

<b>Size (Inches)</b>	86
<b>Aspect Ratio</b>	16:9
<b>Resolution</b>	3840(H) x 2160(V)
<b>Backlight type</b>	DLED
<b>Refreshing Frequency</b>	60Hz
<b>Display Colour</b>	1.07B (10bit)
<b>Display Area</b>	1895.04 (H)× 1065.96(V)mm
<b>Pixel Pitch</b>	0.4935 × 0.4935 mm
<b>Response Time</b>	8ms
<b>Contrast Ratio</b>	1200:1
<b>Viewing Angle</b>	178°(H/V)
<b>Lifetime</b>	≥30000 Hours
<b>Brightness with Glass (typ)</b>	300 cd/m2
<b>Brightness with Glass (min)</b>	350 cd/m2

### TOUCH SYSTEM

<b>Sensing Type</b>	Infrared Recognition
<b>Touch Point</b>	20 Point Touch
<b>Touch Tool</b>	Finger, Passive Infrared Pen
<b>Minimum Object Size</b>	3mm
<b>Response Time</b>	≤10ms
<b>Accuracy</b>	±2mm
<b>Writing Height</b>	≤3mm
<b>Touch Drive</b>	Free Drive
<b>Communication Mode</b>	Full-Speed USB
<b>Interpolation Resolution</b>	32768(W) x 32768(D)

### I/O PORT

<b>HDMI IN</b>	3	<b>HDMI OUT</b>	1	<b>TOUCH 2.0</b>	2
<b>USB 2.0</b>	3	<b>USB 3.0</b>	3	<b>TOUCH OUT</b>	2
<b>VGA IN</b>	1	<b>SPDIF</b>	1	<b>LAN (RJ45)</b>	1
<b>AUDIO IN</b>	1	<b>AUDIO OUT</b>	1	<b>RS232</b>	1
<b>FRONT PHYSICAL KEYS</b>					1



### AUDIO

<b>Sound Channel</b>	2.0
<b>Output Power</b>	2 x 10W

### ANDROID SYSTEM

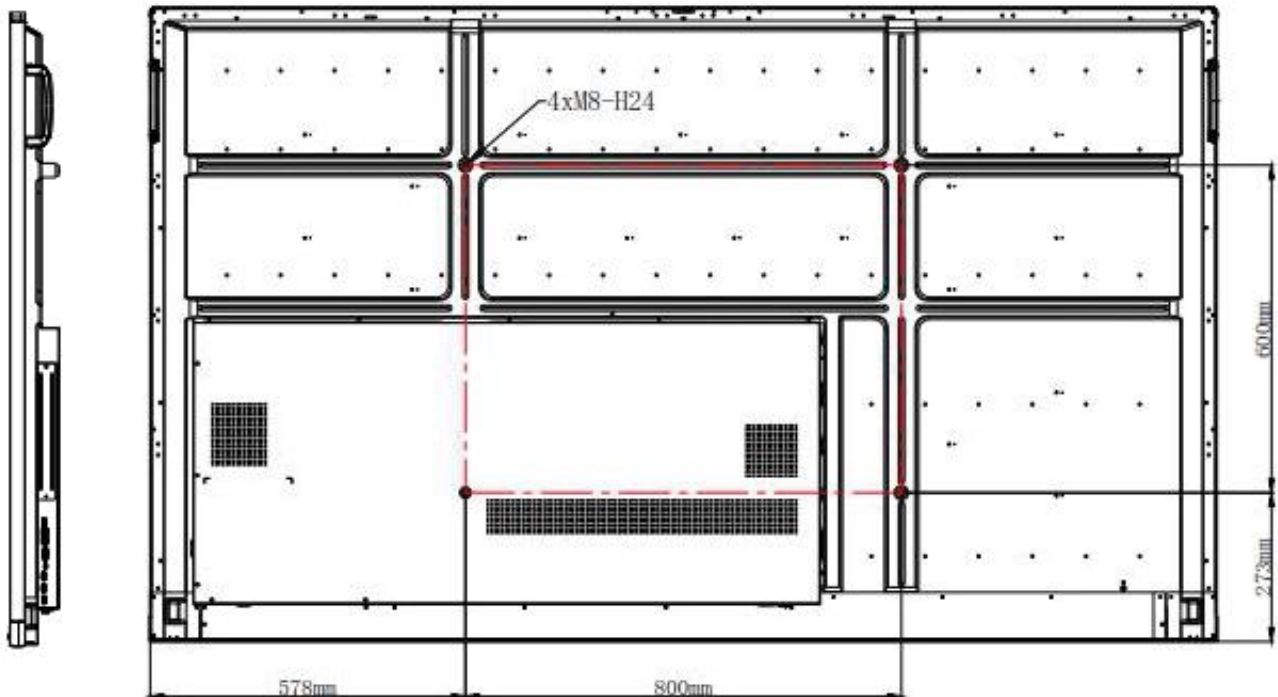
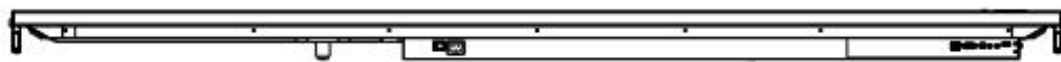
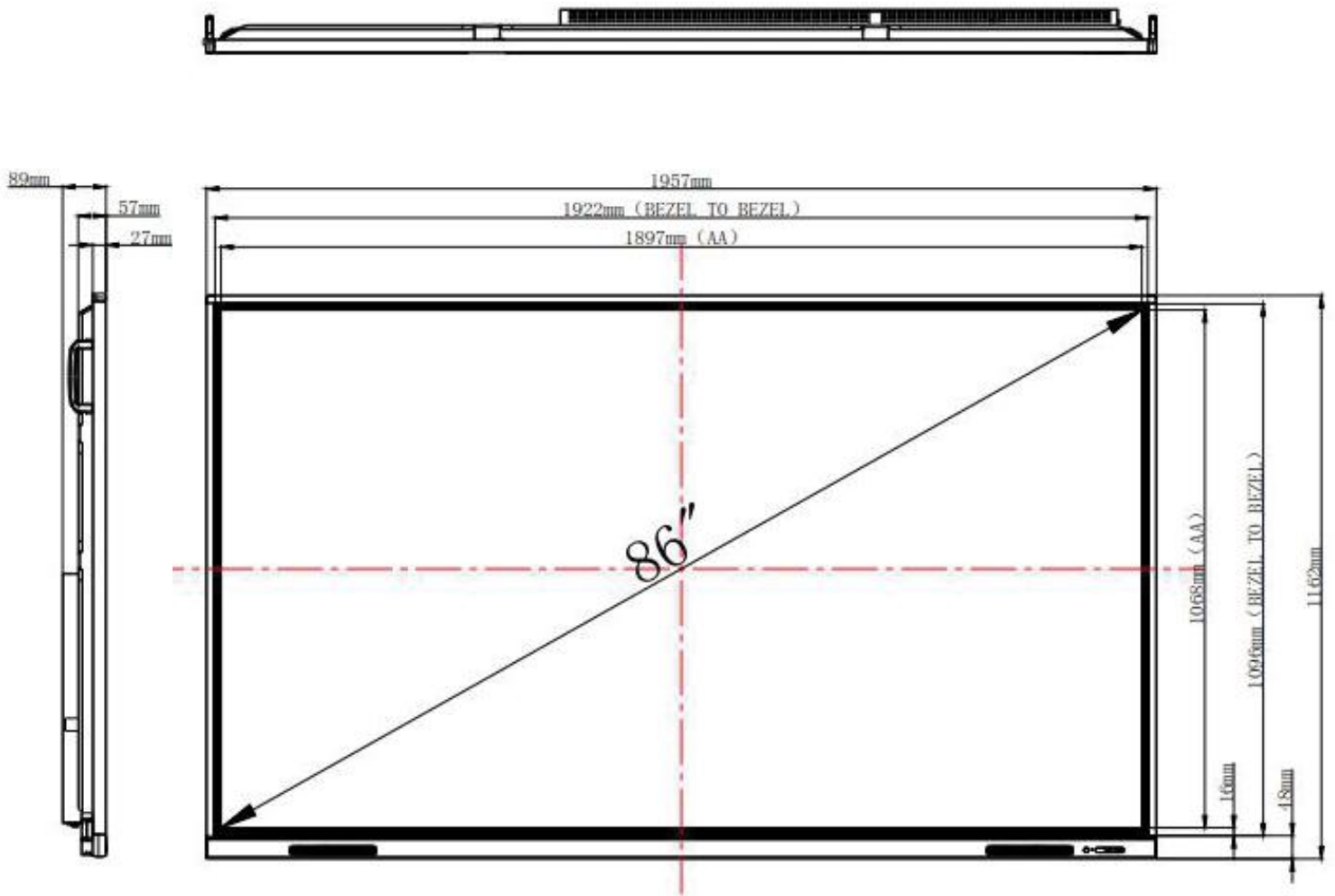
<b>System Version</b>	Android 8.0	<b>Optional PC Module Available</b> Models: SI01 / OPS42A
<b>CPU</b>	A73 x2 + A53 x2	
<b>GPU</b>	Mali G51 x2	
<b>RAM</b>	3GB	
<b>ROM</b>	32GB	

### POWER

<b>Power Requirements</b>	100-240V~ 50/60Hz 5.0A
<b>Overall Power</b>	500W
<b>Standby Power</b>	≤0.5W

### PHYSICAL SPECIFICATIONS

<b>Dimensions LxHxD</b>	1957×1160×87mm
<b>Dimensions (Package) LxHxD</b>	2112×280×1283mm
<b>Thickness of Machine &amp; Wall Mount</b>	117mm (WIB9060G)
<b>Wall-Hanging Screw Spec</b>	M8×25mm
<b>VESA</b>	800 x 600mm
<b>Net Weight</b>	67.45KG
<b>Gross Weight</b>	86.6KG





# DIRECT COMPARISON

ES-BB65		ES-BB75		ES-BB86	
<b>Display</b>					
Size (Inches)	65	75	86		
Aspect Ratio	16:9	16:9	16:9		
Display Area	1428.48(H)×803.52(V)mm	1649.664 (H)×927.936(V) mm	1895.04 (H)× 1065.96(V)mm		
Resolution	3840(H)×2160(V)	3840(H)×2160(V)	3840(H)×2160(V)		
Pixel Pitch	0.372× 0.372mm	0.4296×0.4296mm	0.4935 × 0.4935 mm		
Response Time	8ms	8ms	8ms		
Refreshing Frequency	60Hz	60Hz	60Hz		
Display Colour	1.07B(10bit)	1.07B(10bit)	1.07B(10bit)		
Back Light Type	DLED	DLED	DLED		
Brightness with glass (typ)	300 cd/m2	300cd/m2	300 cd/m2		
Brightness with glass (min)	350 cd/m2	350cd/m2	350 cd/m2		
Contrast Ratio	1200:1	1200:1	1200:1		
Viewing Angle	178° (H/V)	178° (H/V)	178° (H/V)		
Life Time	≥30000 Hours	≥30000 Hours	≥30000 Hours		
<b>Audio</b>					
Sound Channel	2.0	2.0	2.0		
Output Power	2x10W	2x10W	2x10W		
<b>I/O Port</b>					
HDMI IN	3	3	3		
HDMI OUT (Optional)	1	1	1		
VGA IN	1	1	1		
PC AUDIO IN	1	1	1		
AUDIO OUT	1	1	1		
USB 2.0	3 (Including 2 USB ports in front)	3 (Including 2 USB ports in front)	3 (Including 2 USB ports in front)		
USB 3.0	3	3	3		
TOUCH OUT	-	2	2		
TOUCH 2.0	2	-	2		
SPDIF	1	1	1		
RS232	1	1	1		
LAN(RJ45)	1	1	1		
Key Location & Number	Front physical keys, 1	Front physical keys, 1	Front physical keys, 1		
<b>Touch System</b>					
Sensing Type	Infrared recognition	Infrared recognition	Infrared recognition		
System	Windows10/Windows8/Windows7/Windows XP	Windows10/Windows8/Windows7/Windows XP	Windows10/Windows8/Windows7/Windows XP		
Touch Point	/Linux/Mac/Android/Chrome	/Linux/Mac/Android/Chrome	/Linux/Mac/Android/Chrome		
Minimum Object Size	20 points touch	20 points touch	20 points touch		
Touch Tool	3mm	3mm	3mm		
Response Time	Finger,Passive infrared pen	Finger, Passive infrared pen	Finger,Passive infrared pen		
Accuracy	≤10ms	≤10ms	≤10ms		
Writing Height	±2mm	±2mm	±2mm		
Communication Mode	≤3mm	≤3mm	≤3mm		
Touch Drive	Full-speed USB	Full-speed USB	Full-speed USB		
Interpolation Resolution	Free drive	Free drive	Free drive		
	32767×32767	32768×32768	32768×32768		

# DIRECT COMPARISON

Android System	Android 8.0	Android 8.0	Android 8.0
System Version	Android 8.0	Android 8.0	Android 8.0
CPU	A73*2+A53*2	A73*2+A53*2	A73*2+A53*2
GPU	Mali G51*2	Mali G51*2	Mali G51*2
RAM	2GB	2GB	3GB
ROM	16GB	16GB	32GB
Power			
Power Requirements	100-240V~ 50/60Hz 3.0A	100-240V~ 50/60Hz 3.5A	100-240V~50/60Hz 5.0A
Overall Power	300W	350W	500W
Standby Power	≤0.5W	≤0.5W	≤0.5W

## Physical Specifications

Dimensions LxHxD	1489*897*87mm	1709*1019*87mm	1957*1160*87mm
Dimension (Package) LxWxH	1628*208*1005mm	1860*280*1140mm	2112*280*1283mm
Thickness of machine and wall mount	117mm (WIB9060G)	117mm (WIB9060G)	117mm(WIB9060G)
Wall-hanging Screw Spec	M8*25mm	M8*25mm	M8*25mm
VESA	600*400mm	800*400mm	800*600mm
Net Weight	38.75kg	53.05kg	67.45kg
Gross Weight	48.5kg	69.85kg	86.6kg

## Accessories

Power Cord	x1	x2 (3 meters)	x1
HDMI Cable	x1	x1 (3 meters)	-
USB Touch Cable (Type A-B)	x1	x1 (5 meters)	-
Writing Pen	x2	x2	x2
Remote Control	x1	x1	-
Battery	x2 (AAA)	x2 (AAA)	-

## Environmental Conditions

Operation Temperature	0°C~40°C	0°C~40°C	0°C~40°C
Operation Humidity	10%~90%RH	10%~90%RH	10%~90%RH
Storage Temperature	-20°C~60°C	-20°C~60°C	-20°C~60°C
Storage Humidity	10%~90%RH	10%~90%RH	10%~90%RH
Altitude	Below 5000 meters	Below 5000 meters	Below 5000 meters

## Compatible with PC Module (Optional)

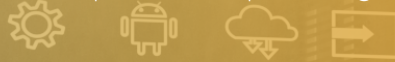
Model	SI01	SI01, OPS42A	SI01, OPS42A
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DIRECT COMPARISON



At DiscoverIBT we are committed to bringing our customers the very best in interactive display technology.

If you have any questions about any of our products, please get in touch.



[WWW.DISCOVERIBT.COM](http://WWW.DISCOVERIBT.COM)



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