










# PYRAMID

## faytech® Interactive Whiteboard Series True Optical Bonding Interactive Flat Panel Displays (IFPDs)

Infrared touch (IR) technology, high-end solution



\*) Mobile stand shown is optional

 <p><b>Touch Functionality</b> Infrared touch, used with finger, pen or other tools (up to 40-point touch)</p>	 <p><b>Easy Video Conferences</b> Microphone array, 48MP camera, and easy screen sharing is possible</p>	 <p><b>Long-Term Operation</b> Built for extensive use within offices and classrooms</p>
 <p><b>Simple &amp; Easy Installation</b> VESA and mounts make for easy installs in any room</p>	 <p><b>Tough, Ruggedized Design</b> Tempered glass front panel &amp; shatter-proof cover glass</p>	 <p><b>Fully Customizable</b> Case, connectors, peripherals etc.</p>
 <p><b>High Resolution</b> Up to 4K resolution (3840×2160) with up to 1.07B colors displayed</p>	 <p><b>Slim &amp; Lightweight Design</b> Simple, sleek, and light frame designs are easy to mount anywhere</p>	 <p><b>True Optical Bonding</b> Provides the sharpest most vivid display image in the industry (different from zero-bonding - see page 8)</p>



4K UHD  
178° Viewing Angle  
Anti-glare  
True Optical Bonding



A311D2 Mainboard  
Android 13  
CPU: A73\*4+A53\*4  
8GB RAM + 128GB ROM



Wireless Screen Share  
Two-way Control  
OTA Update  
48MP Webcam & Mic Array  
Wi-Fi 6  
OPS & Mobile Stand options

# Specifications

Display | Connection | CPU / OS | Touch

## Interactive Whiteboard Series (IR, high-end solution)

Model	FT65A311D2OB	FT75A311D2OB	FT86A311D2OB	
Display	Article Code (GL   EU)	TBD   TBD	TBD   TBD	3030516832   4010078188
	Size	65 inch	75 inch	86 inch
	Type	a-Si TFT-LCD	a-Si TFT-LCD	a-Si TFT-LCD
	Aspect Ratio	16:9	16:9	16:9
	Backlight	LED	LED	LED
	Resolution	3840×2160	3840×2160	3840×2160
	Refresh Rate	60Hz	60Hz	60Hz
	Brightness	450nits	450nits	450nits
	Contrast Ratio	4000:1	4000:1	4000:1
	Viewing Angle(V/H)	178°/178°	178°/178°	178°/178°
	Colors	1.07B(10 bits)	1.07B(10 bits)	1.07B(10 bits)
	LED Lifetime	≥30,000H	≥30,000H	≥30,000H
	Touch Area(L*W)/mm	1445.6*824.8	1667.8*949.9	1914*1088.6
	Display Area(L*W)/mm	1430.5*805.5	1651.4*929.9	1897.04*1067.96
	Glass Material	AG(anti-glare) tempered glass Reflectivity<1%	AG(anti-glare) tempered glass Reflectivity<1%	AG(anti-glare) tempered glass Reflectivity<1%
	Glass Thickness	3.2mm	3.2mm	3.2mm
	Glass Hardness	Mohs 7	Mohs 7	Mohs 7
Bonding	True Optical bonding	True Optical bonding	True Optical bonding	
Connectors	Front	3x Public USB-A 3.0	3x Public USB-A 3.0	3x Public USB-A 3.0
		1x Touch USB-B 3.0 (for front HDMI 2.0)	1x Touch USB-B 3.0 (for front HDMI 2.0)	1x Touch USB-B 3.0 (for front HDMI 2.0)
		1x HDMI 2.0 in	1x HDMI 2.0 in	1x HDMI 2.0 in
		1x Type-C out (DP 1.2+Touch USB 2.0+PD 15W+100Mbps)	1x Type-C out (DP 1.2+Touch USB 2.0+PD 15W+100Mbps)	1x Type-C out (DP 1.2+Touch USB 2.0+PD 15W+100Mbps)
	Rear	1x USB-C 3.0	1x USB-C 3.0	1x USB-C 3.0
		1x RS232 (DB9)	1x RS232 (DB9)	1x RS232 (DB9)
		1x Touch USB-B 3.0 (for DP in)	1x Touch USB-B 3.0 (for DP in)	1x Touch USB-B 3.0 (for DP in)
		1x DP 1.2A in	1x DP 1.2A in	1x DP 1.2A in
		1x HDMI 2.1 in	1x HDMI 2.1 in	1x HDMI 2.1 in
		1x HDMI 2.0 in (ARC)	1x HDMI 2.0 in (ARC)	1x HDMI 2.0 in (ARC)
		1x USB Type-C: -Device mode: DP 1.2 in+Touch+PD 100W+USB 2.0, optional 100Mbps -Host mode: USB 2.0	1x USB Type-C: -Device mode: DP 1.2 in+Touch+PD 100W+USB 2.0, optional 100Mbps -Host mode: USB 2.0	1x USB Type-C: -Device mode: DP 1.2 in+Touch+PD 100W+USB 2.0, optional 100Mbps -Host mode: USB 2.0
		1x Android USB-A 2.0	1x Android USB-A 2.0	1x Android USB-A 2.0
		1x Public USB-A 3.0	1x Public USB-A 3.0	1x Public USB-A 3.0
		1x OTG USB-A 2.0	1x OTG USB-A 2.0	1x OTG USB-A 2.0
		2x WiFi antenna (2.4GHz+5GHz, support wifi 6)	2x WiFi antenna (2.4GHz+5GHz, support wifi 6)	2x WiFi antenna (2.4GHz+5GHz, support wifi 6)
		1x Bluetooth 5.0	1x Bluetooth 5.0	1x Bluetooth 5.0
		1x Earphone out	1x Earphone out	1x Earphone out
1x Coaxial / SPDIF out	1x Coaxial / SPDIF out	1x Coaxial / SPDIF out		
1x HDMI 2.1 out	1x HDMI 2.1 out	1x HDMI 2.1 out		
2x RJ45 (10/100/1000Mbps)	2x RJ45 (10/100/1000Mbps)	2x RJ45 (10/100/1000Mbps)		
CPU / OS	Version	Android 13	Android 13	Android 13
	CPU	Amlogic A311D2 4x Cortex-A73 at 2.2GHz 4x Cortex-A53 at 2.0GHz	Amlogic A311D2 4x Cortex-A73 at 2.2GHz 4x Cortex-A53 at 2.0GHz	Amlogic A311D2 4x Cortex-A73 at 2.2GHz 4x Cortex-A53 at 2.0GHz
	GPU	Arm Mali-G52 MP8 (8EE)	Arm Mali-G52 MP8 (8EE)	Arm Mali-G52 MP8 (8EE)
	RAM	8GB LPDDR4	8GB LPDDR4	8GB LPDDR4
	ROM	128GB	128GB	128GB
Touch	Performance	Technology:Infrared; Minimum Touch Object: 3mm; Touch Precision:2mm; Writing Precision:±0.5mm; Resolution:32767*32767; Response Time: 3.3ms		
	Points	40 point touch/drawing, 20 point writing		
	Tools	Fingers, pens, or other untransparent objects.		
	Compatibility	Windows XP/7/8/10/11; Linux; Chrome OS; Mac OS; Android		
	Features	Dual color writing, palm rejection.		
	Light Resistance	Works under 80,000 lux illumination without issues (Full daylight = 100,000 lux)		

# Specifications

Webcam | OPS | Dimensions & Weight | Other

## Interactive Whiteboard Series (IR, high-end solution)

Model		FT65A311D2OB	FT75A311D2OB	FT86A311D2OB
<b>Webcam (Included)</b>	Type	External - 48MP (see page 4)	External - 48MP (see page 4)	External - 48MP (see page 4)
<b>OPS (Optional)</b>	Compatible with any standard OPS in the market.	Ability to turn the interactive whiteboard into fully functioning Windows or Linux PC		
		No limitations, as the OPS port is universal and compatible with any OPS		
		Turn your whiteboard into a high-performing windows PC with Intel Core OPS		
<b>Dimension &amp; Weight</b>	Physical Dimensions (L*W*T)/mm	1484.5*891.3*88.1 (without wall mount)	1706.7*1016.4*88 (without wall mount)	1952.9*1155.1*88 (without wall mount)
		1484.5*891.3*120.1 (with wall mount)	1706.7*1016.4*120 (with wall mount)	1952.9*1155.1*114.2 (with wall mount)
	Bezel Width/mm	Top/Left/right:19.5 Bottom:47	Top/Left/right:19.5 Bottom:47	Top/Left/right:19.5 Bottom:47
	Packed Dimensions (L*W*H)/mm	1690*210*1060	1920*210*1150	2154*230*1354
	VESA mount installation position	500*400mm	600*400mm	800*400mm
	Net Weight	40Kg±1Kg	53Kg±1Kg	66Kg±1Kg
Gross Weight	52Kg±1Kg	67Kg±1Kg	84Kg±1Kg	
<b>Speaker</b>		20W*2	20W*2	20W*2
<b>Power (Type-C not included)</b>		AC:100-240V;60/50Hz; 300W(Max);208W(Standard); 107.1W(ECO); ≤0.5W(Standby) °C	AC:100-240V;60/50Hz; 430(Max); 259.7W(Standard); 123.9W(ECO); ≤0.5W(Standby)	AC:100-240V;60/50Hz; 550W(Max); 341.6W(Standard); 166.9W(ECO)≤0.5W(Standby)
<b>Environmental Requirement</b>		Operation temperature:0~40 ; Operation humidity:20%~80%RH		
<b>In The Box</b>		2x Pen / 1x Remote control / 1x 3M Power cable / 1x 3M HDMI cable / 1x 3M A-B USB cable		
<b>Wall Mount</b>		2x Manual (1 for All-in-one touch panel, 1 for wall mount) / 1x Installation guide / 1x Warranty card / 1x Qualified certificate / 1x Packing list		
<b>Mobile Floor Stand</b>		Standard included		
<b>Warranty</b>		Optional (see page 5)		
		Touch panel/OPS & accessories: by sales contract. Software upgrade: free for lifetime.		

# 48MP Webcam

(included)



Model	FTMP48 (with microphone)
Sensor	48MP Sensor for 12Mp Tetra Bayer with 1/2 optics inch
Pipe Size	0.8x0.8um
Working Voltage	5V
Working Current	1A
Frequency	50Hz
Interface	USB 2.0
Infrared Filter	/
Lens Structure	/
Interface Speed	/
Video Format	YUV / MJPG
Supported Resolutions	15fps@mjpg 4208X3120 30fps @mjpg/h264/h265 3840x2160 2560x1440 1920x1080 1280x720 1024x768 640x480 640x360 320x180 10fps@YUY2 1280x720 30fps@YUY2 640x480 320x240
Focus Mode	Fixed focus
Focusing Speed	/
Microphone (optional)	8MIC
MIC plate size	130x6mm
MIC spacing	40mm
Signal to Noise Ration (SNR)	64.5db
Sensitivity	-26db
Acoustic Overload Point (AOP)	120 db SPL (Sound Pressure Level)
Pick-up Distance	10m
Indicator	Yes
Algorithm	Face Tracking, Sound Source Localization, echo cancellation
Field of View (FOV)	D:114.9 H:110. V:85.7 ±3°
Total Track Length (TTL)	7.18mm ± 0.15mm
Effective Focal Length (EFT)	2.59mm
F/NO (Infinite)	2.2 ± 5%
TV-distortion	<1.5%
Focus Distance	0.4 - 10m
Effective Depth of Field	0.4 - 10m
Thread Specifications	/
Sampling Rate	/
Sampling Bits	/
Wire	FFC
Support Function	1. Acoustic Echo Cancellation (AEC) 2. 180° horizontal plane pickup, beamforming 3. Adaptive Environment Noise Reduction 4. Reverberation Removal 5. Sound Source Localization 6. Adaptive Voice Enhancement 7. Automatic Gain Control (AGC)

Specifications are subject to change without notice and may vary from provided promotional materials



**48MP Resolution**  
**110° Field of View**



**Face Tracking**  
**Sound Source Localization**



**8-Mic Array**  
**10m pick-up distance**  
**Echo Elimination**  
**Environmental Noise Suppression**

# SPCC Steel Mobile Stand

(optional)



Model	FTMSWH
Article Code (GL   EU)	3030516687   4010078187
Material	SPCC steel
Color	Titanium
Capacity	max. 200kg
Wheels	4 wheels with brakes
Rotation Option	No
VESA (W*H)/mm	1000(max)*600
Physical Dimension(L*W*H) /mm	1162*719.7*1592
Packing Dimension(L*W*H) /mm	1182*125*520
Net Weight	15.8kg
Gross Weight	17.3kg
Applicable with	65", 75" & 86" flat panel displays

Specifications are subject to change without notice and may vary from provided promotional materials



**SPCC Steel**  
**VESA 1000(max)\*600**  
**Titanium Finish**









**Mobile wheels**  
**With brakes**



**Hold up to 200kg**  
**for 65", 75" & 86"**

# Launcher Desk Apps (main page)


















App Icon	App Details and Description
	<b>Browser</b> Allows you to visit any website by typing the requested URL in the search bar
	<b>Airgo Cast (screen share)</b> Allows you to cast your screen from mobile devices - e.g. tablet, phone, laptop, etc., to the whiteboard.
	<b>Whiteboard</b> Annotation software, this allows you to interact, draw and write on top of the content on the whiteboard, then save or share for later use.
	<b>File Manager</b> Allows you go into the files which are on the whiteboard built-in storage or inserted USB stick. Files include videos, audio, documents, presentations, etc.
	<b>Welcome</b> Offers different themes as welcoming or greeting backgrounds, including business meetings, staff welcoming, birthday parties, lesson brief, etc.
	<b>More</b> This is a shortcut allows you to go to the 'Additional Apps' page, which are preinstalled on the whiteboard. See page 8.

Launcher Desk Apps are customizable.

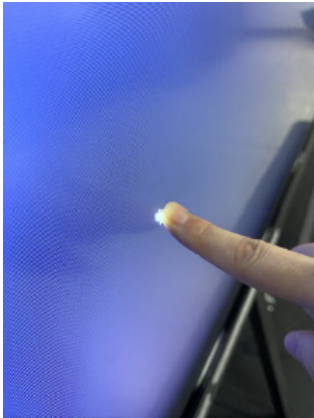


# Included Additional Apps



App Icon	App Details and Description
	<p><b>Easy Upload</b> Go to the OTA (Over The Air) settings page.</p>
	<p><b>Browser</b> Allows you to visit any website by typing the requested URL in the search bar</p>
	<p><b>Gallery</b> Go to the saved photos of the built-in storage of the whiteboard.</p>
	<p><b>Screen Record</b> This app allows you to record the content that is being displayed or presented on the whiteboard screen.</p>
	<p><b>Settings</b> Visit the system settings menu.</p>
	<p><b>WPS</b> Pre-installed office document viewer, this program can open: Word, Excel and PowerPoint files.</p>
	<p><b>Hardware Detector</b> Provides a quick and effective test of the hardware configuration, including externally linked devices.</p>
	<p><b>VoteKit</b> A voting app, this provides choices (as set by host) for students or employees to vote for by scanning the generated QR code.</p>
	<p><b>Calendar</b> View or edit the calendar.</p>
	<p><b>Calculator</b> Standard calculator app to make swift calculations as needed.</p>
	<p><b>Whiteboard</b> Annotation software, this allows you to interact, draw and write on top of the content on the whiteboard, then save or share for later use.</p>
	<p><b>Timer</b> Turn on or configure the timer and allow it to run in the background.</p>
	<p><b>Welcome</b> Offers different themes as welcoming or greeting backgrounds, including business meetings, staff welcoming, birthday parties, lesson brief, etc.</p>
	<p><b>File Manager</b> Allows you go into the files which are on the whiteboard built-in storage or inserted USB stick. Files include videos, audio, documents, presentations, etc.</p>
	<p><b>Airgo Cast (screen share)</b> Allows you to cast your screen from mobile devices - e.g. tablet, phone, laptop, etc., to the whiteboard.</p>

# faytech's True Optical Bonding Advantages



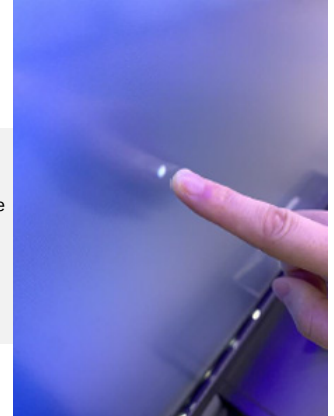
## faytech's True Optical Bonding



- A liquid adhesive, **CLEAR-BOND**, is applied between the layers of the display.
- **CLEAR-BOND** fills the air gap completely, resulting in a uniform and optically clear bond.
- Thermal curing is then used to solidify the bond.
- This true optical bonding offers several advantages, including **improved contrast, reduced reflection, increased ruggedness, and enhanced durability**. It also **eliminates the possibility of dust or moisture accumulation** between the cover glass and LCD panel.

## Zero Bonding

- The LCD panel is directly attached to the protective glass cover using double-sided adhesive strips.
- Unlike true optical bonding, zero bonding **does not fill the entire air gap uniformly**.
- Zero bonding can still provide some level of reflection reduction and durability enhancement compared to displays without any bonding, but it **does not offer the same level of optical performance and ruggedness as true optical bonding**.



Feature	faytech's CLEAR-BOND True Optical Bonding	Zero Bonding	Air Gap (no bonding)
Reflections	8-10%	12-15%	15-18%
Brightness	-8%	-15%	-18%
Glass Transparency	90-92%	85-88%	82-85%
Hardness	7H	7H	7H
Impact Energy Without Damage	IK08-10	IK07-08	IK07-08
Shatterproof	Yes	No	No
Dust or Humidity	No	Yes	Yes
Viewing Angle	Larger	Middle	Smaller
Contrast and Color Value	High	Normal	Low
Touch Performance	Fast touch response and high accuracy	Potential slight delay in touch response and relatively lower accuracy	Likely delay in touch response and higher chance of misdirected accuracy
Screen Surface Levelling (flatness)	Screen surface levelling is even with no visual effect issues	Screen levelling may fluctuate to some degree with potential irregularities	Average screen levelling with a border that may affects the visual quality

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