

PYRAMID










faytech® Interactive Whiteboard

True Optical Bonding Interactive Flat Panel Displays (IFPDs)

Infrared touch (IR) technology, high-end solution



*) Mobile stand shown is optional

 <p>Touch Functionality Infrared touch, used with finger, pen or other tools (up to 40-point touch)</p>	 <p>Easy Video Conferences Microphone array, 48MP camera, and easy screen sharing is possible</p>	 <p>Long-Term Operation Built for extensive use within offices and classrooms</p>
 <p>Simple & Easy Installation VESA and mounts make for easy installs in any room</p>	 <p>Tough, Ruggedized Design Tempered glass front panel & shatter-proof cover glass</p>	 <p>Fully Customizable Case, connectors, peripherals etc.</p>
 <p>High Resolution Up to 4K resolution (3840×2160) with up to 1.07B colors displayed</p>	 <p>Slim & Lightweight Design Simple, sleek, and light frame designs are easy to mount anywhere</p>	 <p>True Optical Bonding Provides the sharpest most vivid display image in the industry (different from zero-bonding - see page 9)</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

86" Interactive Whiteboard (IR, high-end solution)

Model		FT86A311D2OB
Display	Article Codes (GL EU)	3030516832 4010078188
	Size	86 inch
	Type	a-Si TFT-LCD
	Aspect Ratio	16:9
	Backlight	LED
	Resolution	3840×2160
	Refresh Rate	60Hz
	Brightness	450nits
	Contrast Ratio	4000:1
	Viewing Angle(V/H)	178°/178°
	Colors	1.07B(10 bits)
	LED Lifetime	≥30,000H
	Touch Area(L*W)/mm	1914*1088.6
	Display Area(L*W)/mm	1897.04*1067.96
	Glass Material	AG(anti-glare) tempered glass Reflectivity<1%
	Glass Thickness	3.2mm
	Glass Hardness	Mohs 7
Bonding	True Optical bonding	
Connectors	Front	3x Public USB-A 3.0
		1x Touch USB-B 3.0 (for front HDMI 2.0)
		1x HDMI 2.0 in
		1x Type-C out (DP 1.2+Touch USB 2.0+PD 15W+ 100Mbps)
		1x USB-C 3.0
		1x RS232 (DB9)
		1x Touch USB-B 3.0 (for DP in)
		1x DP 1.2A in
		1x HDMI 2.1 in
		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 Android USB-A 2.0
	Rear	1x Public USB-A 3.0
		1x OTG USB-A 2.0
		2x WiFi antenna (2.4GHz+5GHz, support wifi 6)
		1x Bluetooth 5.0
		1x Earphone out
1x Coaxial		
1x HDMI 2.1 out		
2x RJ45 (10/100/1000Mbps)		
CPU / OS	Version	Android 13
	CPU	Amlogic A311D2 4x Cortex-A73 at 2.2GHz 4x Cortex-A53 at 2.0GHz
	GPU	Arm Mali-G52 MP8 (8EE)
	RAM	8GB LPDDR4
	ROM	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
	Light Resistance	Works under 80,000 lux illumination without issues (Full daylight = 100,000 lux)

Specifications

Webcam | OPS | Dimensions & Weight | Other

86" Interactive Whiteboard (IR, high-end solution)

Model		FT86A311D2OB
Webcam (Included)	Type	External - 48MP (see page 4)
OPS (on project request)	CPU	Intel Core i5 or i7 / Customization (see page 6)
	RAM	4G DDR4 / Customization (see page 6)
	Storage	256G/512G SSD / Customization (see page 6)
	Operating System	Windows 10 or 11 / Customization (see page 6)
	Network	Subject to model (see page 6)
	Interface	Subject to model (see page 6)
	Physical Dimensions (L*W*H)/mm	Subject to model (see page 6)
Dimension & Weight	Physical Dimensions (L*W*T)/mm	1952.9*1155.1*88 (without wall mount) 1952.9*1155.1*114.2 (with wall mount)
	Bezel Width/mm	Top/Left/right:19.5 Bottom:47
	Packed Dimensions (L*W*H)/mm	2154*230*1354
	YESA mount installation position	800*600mm
	Net Weight	66Kg±1Kg
	Gross Weight	84Kg±1Kg
	Speaker	
Power (Type-C not included)		AC:100-240V;60/50Hz; 550W(Max); 341.6W(Standard); 166.9W(ECO)≤0.5W(Standby)
Environmental Requirement		Operation temperature:0-40°C; Operation humidity:20%-80%RH
Accessories		2x Pen / 1x Remote control / 1x 3M Power cable / 1x 3M HDMI cable / 1x 3M A-B USB cable 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
Wall Mount		Standard included
Mobile Floor Stand		Optional (see page 5)
Warranty		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

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SPCC Steel
VESA 1000(max)*600
Titanium Finish



Mobile wheels
With brakes



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

Open Pluggable Specification: Win10/11, Linux

(on project request)



Model	FTOPSTL (Tiger Lake)	FTOPSCS (Coffee Lake)	FTOPSA (Alder Lake)
Version (CPU + Storage)	V1: Core i5 1155G7, 8G+256G V2: Core i5 1155G7, 16G+256G V3: Core i7 11390H, 8G+256G V4: Core i7 11390H, 16G+256G	V1: Core i5-10210U, 8G+256GB V2: Core i5-10210U, 16G+256GB V3: Core i7-10510U, 8+256GB V4: Core i7-10510U, 16G+256GB	V1: Core i5 1235U, 8+256GB V2: Core i5 1235U, 16G+256GB V3: Core i7 1255U, 8G+512GB V4: Core i7 1255U, 16G+512GB
Processor	Intel Core 11th I5/I7 CPU	Intel Core 10th I5/I7 CPU	Intel Core 12th I5/I7 CPU
Chipsets	Tiger Lake	Coffee Lake	Alder Lake
Graphics	Intel® Iris Graphics	Intel® Iris Graphics / Intel® UHD Graphics	Intel® Iris® Xe Graphics
Memory	2x SO DIMM DDR4 (Max 32GB)	2x SO DIMM DDR4 (Max 32GB)	2x SO DIMM DDR4 (Max 32GB)
Storage	1x M.2 2280 SSD, SATA, optional with NVME 1x 2.5"HDD	1x M.2 2280 SSD, SATA, optional with NVME	1x M.2 2280 SSD, SATA, optional with NVME
WLAN	1x M.2 2230 for WIFI/BT	1x M.2 2230 for WIFI/BT	1x M.2 2230 for WIFI/BT
LAN	Intel I219-V Gigabit Ethernet	Intel Gigabit Ethernet	Intel Gigabit Ethernet
Audio	Realtek HD Audio IC	Realtek HD Audio	Realtek HD Audio
Interface	3x USB3.0, 2x USB2.0 1x Type-C (Only USB) 1x RJ45 10/100/1000M 1x HDMI 1.4 out, Max.4K/30Hz 1x DP out, Max4K@60Hz 1x 3.5mm Line out, 1x 3.5mm Mic in 2x WIFI/BT ANT 1x Power button 1x Power LED 1x HDD LED	1x USB2.0, 3x USB3.0 1x Type-C (Only USB) 1x RJ45 10/100/1000M 1x HDMI 1.4 out, Max.4K@30Hz 1x 3.5mm Line out, 1x 3.5mm Mic in 2x WIFI/BT ANT 1x Power button 1x Power LED 1x HDD LED	2x USB3.1, 2x USB3.0 1x Type-c (Only USB) 1x RJ45 10/100/1000M 1x HDMI 2.0 out 1x 3.5mm Line out, 1x 3.5mm Mic in 2x WIFI/BT ANT 1x Power button 1x Power LED 1x HDD LED
OPS 80PIN	1x HDMI 2.0 out, 4K/60Hz 1x USB2.0 1x USB3.0 1x TTL 1x DC IN	1x HDMI 2.0 out, 4K/60Hz, 2x USB2.0 1x USB3.0 1x TTL 1x DC input	1x HDMI 2.0 out, 4K/60Hz, 1x DP 1.4 out 2x USB2.0 1x USB3.0 1x TTL 1x DC input
Power	12~19V DC IN	12~19V DC IN	12~19V DC IN
Additional Features	No	No	Vpro, TPM, optional
Watchdog	Support	Support	Support
Case	Metal	Metal	Metal
Dimension	195 (L)*180 (W) *30(H)mm	119 (L)*180 (W) *30(H)mm	119 (L)*180 (W) *30(H)mm
Environment	Operating 0°C~40°C Storage -20°C~70°C 10%~95% (non-condensing)	Operating 0°C~40°C Storage -20°C~70°C 10%~95% (non-condensing)	Operating 0°C~40°C Storage -20°C~70°C 10%~95% (non-condensing)
OS	Win10 / Win11	Win10 / Win11	Win10 / Win11 / Linux

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Windows 10 / 11
Linux









11th gen Tiger Lake
10th gen Coffee Lake
12th gen Alder Lake
8/16G RAM
256/512G SSD



Wi-Fi + Bluetooth
12-19V DC-IN
Type-C, HDMI, USB 2,
USB 3, RJ45, DP

Launcher Desk Apps (main page)


















App Icon	App Details and Description
	Browser Allows you to visit any website by typing the requested URL in the search bar
	Airgo Cast (screen share) Allows you to cast your screen from mobile devices - e.g. tablet, phone, laptop, etc., to the whiteboard.
	Whiteboard 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.
	File Manager 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.
	Welcome Offers different themes as welcoming or greeting backgrounds, including business meetings, staff welcoming, birthday parties, lesson brief, etc.
	More This is a shortcut allows you to go to the 'Additional Apps' page, which are preinstalled on the whiteboard. See page 8.

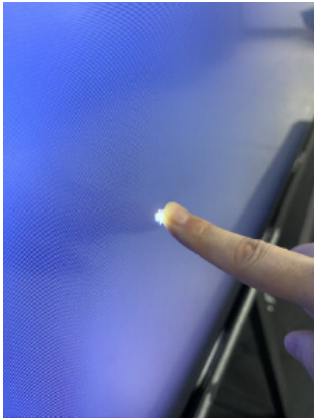
Launcher Desk Apps are customizable.

Included Additional Apps



App Icon	App Details and Description
	<p>Easy Upload Go to the OTA (Over The Air) settings page.</p>
	<p>Browser Allows you to visit any website by typing the requested URL in the search bar</p>
	<p>Gallery Go to the saved photos of the built-in storage of the whiteboard.</p>
	<p>Screen Record This app allows you to record the content that is being displayed or presented on the whiteboard screen.</p>
	<p>Settings Visit the system settings menu.</p>
	<p>WPS Pre-installed office document viewer, this program can open: Word, Excel and PowerPoint files.</p>
	<p>Hardware Detector Provides a quick and effective test of the hardware configuration, including externally linked devices.</p>
	<p>VoteKit 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>Calendar View or edit the calendar.</p>
	<p>Calculator Standard calculator app to make swift calculations as needed.</p>
	<p>Whiteboard 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>Timer Turn on or configure the timer and allow it to run in the background.</p>
	<p>Welcome Offers different themes as welcoming or greeting backgrounds, including business meetings, staff welcoming, birthday parties, lesson brief, etc.</p>
	<p>File Manager 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>Airgo Cast (screen share) 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



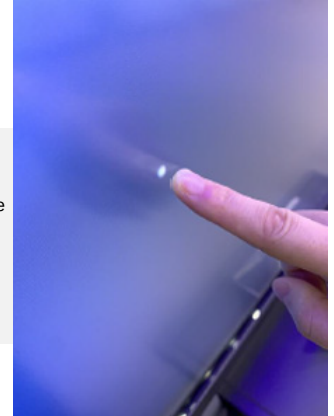
faytech's True Optical Bonding



- 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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