Aeroframe AF500

500x500 mm Rental LED Display

Excel LED | excelleddisplay.com

Key features

- Fine pitch P1.25–P2.604 (GOB) — the finest pitch in the Aeroframe range
- 8 kg die-cast aluminum cabinet — single-person install & strike
- Half-arc lock -5°~+5° for straight & curved setups
- 3840–7680Hz refresh · 15000:1 contrast · 12–16 bit
- Front & rear maintenance
- Interlocks vertically with the 500×1000mm Aeroframe AF1000

Compatibility & control

Category	Compatible	Notes
Cabinet interlock	Aeroframe AF500 ↔ AF1000 (vertical)	Interlocks vertically; mix sizes in one wall (confirm your mix with our engineers).
Module	250×250 mm	Shared across the Aeroframe pitch range.
Control system	Industry-standard control system — brand and model confirmed per project	We confirm the exact receiving card, sending card and firmware revision against your pixel count and scan mode before quotation.
Cabinet sealing	Indoor IP31 / outdoor IP65 (front & rear)	IP65 is defined by IEC 60529 as dust-tight and protected against water jets. Indoor cabinets are IP31 and are not for wet use.
Power input	AC90-264V, 47-63Hz	Wide-range input; size distribution per pitch.

Specifications — Indoor

Feature	P1.25	P1.56	P1.95	P2.5	P2.604	P2.976	P3.91	P4.81
Pixel Pitch	1.25mm	1.56mm	1.95mm	2.5mm	2.604mm	2.976mm	3.91mm	4.81mm
LED Type	SMD1010 (GOB)	SMD1212 (GOB)	SMD1515 (GOB)	SMD1515 (GOB)	SMD1515 (GOB)	SMD1515	SMD2020	SMD2020
Module Resolution	200×200	160×160	128×128	100×100	96×96	84×84	64×64	52×52
Cabinet Resolution	400×400	320×320	256×256	200×200	192×192	168×168	128×128	104×104
Physical Density (dots/m²)	640000	409600	262144	160000	147456	112896	65536	43264
Brightness	≥600 nits	≥600 nits	≥800 nits	≥800 nits	≥800 nits	≥800 nits	≥1000 nits	≥1000 nits
Viewing Distance	3–50 m	3–50 m	3–100 m	4–150 m	4–150 m	6–200 m	4–100 m	4–100 m
Scan Mode	1/50	1/40	1/32	1/25	1/32	1/28	1/16	1/13
Module Size	250×250 mm							
Module Quantity	2×2 per cabinet							
Cabinet Size	500×500×84 mm							
Cabinet Weight	8 kg							
Cabinet Material	Die-cast Aluminum							
Viewing Angle (H/V)	160° / 160°							
Contrast Ratio	15000 : 1							
Frame Frequency	50/60 Hz							
Grey Scale	12–16 bit (optional)							
Refresh Rate	3840–7680 Hz							
Color Temperature	5000–12000 K (optional)							
IP Rating	IP31							
Power (Max/Avg)	600 / 200–300 W/m²							
Power Input	AC90–264V, 47–63Hz							
Working Temp / Humidity	-20–60 °C / 10%–85% RH							
Storage Temp / Humidity	-20–60 °C / 10%–85% RH							
Maintenance	Front / Rear							
Standard	CCC / CE / RoHS / FCC / CB / TUV / IEC							

Specifications — Outdoor

Feature	P2.604	P2.976	P3.91	P4.81	P5.95
Pixel Pitch	2.604mm	2.976mm	3.91mm	4.81mm	5.95mm
LED Type	SMD1415	SMD1415	SMD1921	SMD1921	SMD2727
Module Resolution	96×96	84×84	64×64	52×52	42×42
Cabinet Resolution	192×192	168×168	128×128	104×104	84×84
Physical Density (dots/m²)	147456	112896	65536	43264	28224
Brightness	≥4500 nits	≥4500 nits	≥5000 nits	≥5000 nits	≥5000 nits
Viewing Distance	3–50 m	3–100 m	4–150 m	4–150 m	6–200 m
Scan Mode	1/32	1/28	1/16	1/13	1/7
Module Size	250×250 mm				
Module Quantity	2×2 per cabinet				
Cabinet Size	500×500×84 mm				
Cabinet Weight	8 kg				
Cabinet Material	Die-cast Aluminum				
Viewing Angle (H/V)	160° / 160°				
Contrast Ratio	15000 : 1				
Frame Frequency	50/60 Hz				
Grey Scale	12–16 bit (optional)				
Refresh Rate	3840–7680 Hz				
Color Temperature	5000–12000 K (optional)				
IP Rating	IP65 (front & rear)				
Power (Max/Avg)	800 / 200–300 W/m²				
Power Input	AC90–264V, 47–63Hz				
Working Temp / Humidity	-20–60 °C / 10%–85% RH				
Storage Temp / Humidity	-20–60 °C / 10%–85% RH				
Maintenance	Front / Rear				
Standard	CCC / CE / RoHS / FCC / CB / TUV / IEC				

Aeroframe AF500 vs sibling series

Feature	Aeroframe AF500	Aeroframe AF1000
Cabinet Size	500×500×84 mm	500×1000×84 mm
Weight	8 kg	14.5 kg
Coverage per cabinet	0.25 m²	0.5 m²
Indoor pitch range	P1.25–P4.81 (GOB on fine pitch)	P2.976–P4.81
Outdoor pitch range	P2.604–P5.95 (IP65)	P2.604–P5.95 (IP65)
Best for	Fine-pitch indoor, XR, curved creative	Large outdoor spans, big event backdrops

Specifications are taken from the Aeroframe R3 series product specification sheet (Excel LED). Indoor and outdoor variants differ in LED type, brightness, scan mode and IP rating; the cabinet, module and control platform are shared. Figures marked as typical are for preliminary reference and may be updated with product iteration; confirmed project values are issued with the quotation. IP65 is defined by IEC 60529. | excelleddisplay.com