

Kiosk and Digital Signage - Standard Widescreen & Large Format (With or Without Touch)



Embedded AMLCD Monitors for Indoor and Outdoor Environments

As kiosks and digital signage move beyond traditional deployments, the shortcomings of commodity solutions become more evident as the integration process becomes more complex. Lighting systems and outdoor use make screens more difficult to read. Large deployments require software and firmware solutions to streamline maintenance and control.

Planar applies its expertise with industrial environments to create kiosk and digital signage solutions that handle conditions where "plain vanilla" displays fail. Our customization experience has been applied to numerous projects that need a tailored solution.

APPLICATIONS:

- Quick Serve Restaurants (QSR)
- Drive-through windows
- End cap displays
- Retail/POS
- Train cars
- Ticketing machines
- Hospitality
- Gaming
- ATMs

BENEFITS

INDOOR

- Customized solutions to suit your display needs
- Long product life

OUTDOOR

- Customized solutions to suit your display needs
- Solutions for extreme conditions: cooling kits, IR retarders and many more customization options available
- In-house optical bonding





KIOSKS

Standard to High Ambient

The LA Open-Frame Kiosk Display product family, perfect for indoor environments, includes 15", 17" and 19" open-frame monitors with or without touchscreens. The LA15, LA17 and LA19 products are available with 5-wire resistive, surface acoustic wave or capacitive touchscreens.

The LB Open-Frame Kiosk Display product family, perfect for indoor environments where a bright, attention-grabbing display is needed, features a brightness of 550 cd/m², almost twice as bright as standard displays.

POINT OF SALE (POS)

Sleek POS Display for Retail Applications

The LT1201 and LT1201MSR, with integrated MSR reader, are sleek, ultra-low profile point-of-sale touchscreen displays that set a new standard for energy efficiency, visual aesthetics and ease of use. They are durable for rugged daily use, but compact and light weight for easy handling.

DIGITAL SIGNAGE

Dependable Solutions for Retail Environments

These large format digital displays come in slim bezel design and bring to you a full HD picture quality well suited for digital signage applications. Their high brightness and contrast ratio make it ideal for outdoor and brightly lit indoor installations. In addition to the sleek design and great technology, these monitors provide wide viewing angle and multiple ranges of digital inputs for greater flexibility and connectivity options.

ULTRA THIN DIGITAL SIGNAGE

Ideal For Space Constrained Applications

BENEFITS:

- Ideal for space constrained, large format applications
- Anti-vandal provisions
- LED backlighting extends life and reduces power consumption
- Video can be transmitted via HDMI or fiber optics to eliminate electrical interference

PLANAR PROVIDES

1. Customize by adding enclosures, touchscreens, vandal glass, cables, etc.
2. Touchscreen flexibility- choose whatever technology you want
3. Standard products that meet most requirements

Kiosk integrators need product flexibility and ease of integration.

PLANAR PROVIDES

1. Green, low power consumption, RoHS compliant
2. Brightness of 300 cd/m² w/LED backlight
3. Optical quality is unsurpassed

PLANAR PROVIDES

1. Add a bezel, touchscreen, cable or enclosure for less than you might think
2. Custom firmware across multiple sizes simplifies management of a display network

Indoor digital signage is about branding and network management.

PLANAR PROVIDES

1. Ultra thin profile makes the display perfect for crowded environments
2. Available fiber optic interface is unaffected by electrical noise
3. Installs in minutes, easily serviceable
4. Low power consumption LED backlight
5. Custom mounting options

LA, LB – STANDARD TO HIGH AMBIENT Embedded and Point-of-Sale AMLCD Monitors With or Without Touch

Be sure to **ASK US**
about LCD Enhancements

LOOK!
New touch
options.



SPECIFICATIONS	LA1500R - 15"	LA1710R - 17"	LA1950R - 19"	LB1503R - 15"	LT1201/ LT1201MSR - 12"
Native Resolution	1024 x 768	1280 x 1024	1280 x 1024	1024 x 768	1280 x 800
Brightness (w/o touchscreen)	250 cd/m ²	300 cd/m ²	228 cd/m ²	550 cd/m ²	300 cd/m ²
Contrast Ratio (typical)	600:1	800:1	1000:1	500:1	500:1
Response Time (typical)	8 ms	5 ms	8 ms	8 ms	30 ms
Viewing Angle (typical @ 10:1 CR)	160° H, V	160° H, V	160° H, V	160° H, 140° V	178° H, V
Power Consumption (operational)	30 W (2 W standby)	40 W (3 W standby)	25 W (4 W standby)	25 W (3 W standby)	7.5 W
Input Options	Analog	Analog/DVI-D	Analog	Analog/DVI-D/Composite NTSC, PAL	VGA, DVI-D
Magnetic Reader	-	-	-	-	LT1201: No Strip LT1201MSR: Integrated Mag. Stripe Reader
Power Supply	External Module with IEC 320 Connector, USA, Cord-set, UL1950 certified.	External Module with IEC 320 Connector, USA, Cord-set, UL1950 certified.	External Module with IEC 320 Connector, USA, Cord-set, UL1950 certified.	External Module with IEC 320, Connector, USA and European, Cord-set, UL1950 certified	-
Display Active Area	15" diagonal (304 mm x 228 mm)	17" diagonal (338 mm x 270 mm)	19" diagonal (376 mm x 301 mm)	15" diagonal (304 mm x 228 mm)	12" diagonal (261.12 mm x 163.2 mm)
Dimensions (WxHxD)	14.2" x 10.6" x 1.8" (360 mm x 270 mm x 46 mm)	14.6" x 11.8" x 1.8" (371 mm x 299 mm x 46 mm)	17.2" x 14.3" x 3.2" (436 mm x 363 mm x 81 mm)	14.2" x 10.2" x 1.8" (360 mm x 260 mm x 46 mm)	13.39" x 11.02" x 3.74" (340 mm x 280 mm x 95 mm)
Approvals	FCC-B, CE, TUV, RoHS	FCC-B, CE, TUV, RoHS	FCC-B, CE, TUV, RoHS	UL, FCC-B, CE-B, TUV, RoHS	cUL, CE, FCC-B
Operating Temperature	5 - 35 °C	5 - 35 °C	0 - 50 °C	5 - 35 °C	0 - 40 °C
Service and Support/Warranty	3 Year	3 Year	3 Year	1 Year	1 Year
Extended Warranty Package	-	-	-	Extends standard 1 Year warranty to a total of 3 Years - 990-0068-00	Extends standard 1 Year warranty to a total of 3 Years - 990-0068-00
Mounting Options	Adjustable rear panel mounting brackets included. VESA 75 mm compatible.	Adjustable rear panel mounting brackets included. VESA 100 mm compatible.	Adjustable rear panel mounting brackets included. VESA 100 mm compatible.	VESA 75 mm rear mount and edge mount compatible.	-
Touchscreen	Available in Resistive and SAW.	Available in Resistive, SAW and Capacitive.	Available in Resistive, SAW and Capacitive. .	Custom touch solutions available.	Surface Capacitive

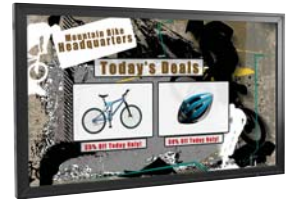
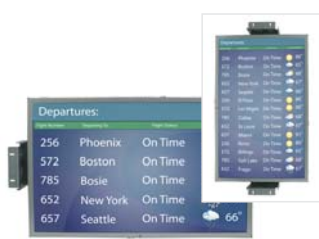
LARGE FORMAT AND WIDESCREEN DIGITAL SIGNAGE

Dependable Solutions For Retail Environments

"We wanted to work with a manufacturer who could combine the quality assurance systems and capabilities of a large vendor with the flexibility and speed of a smaller supplier. The Display System is a critical component in the PRN solution and we've found Planar to be a nimble and valuable partner."

- Scott Francis, Chief Technology Officer for Premier Retail Networks (PRN)

Other size options and custom configurations are available.



SPECIFICATIONS	LB2650W HIGH DEFINITION READY!	NEW! LB3250 WHW ULTRA THIN PROFILE!	NEW! PY4200	NEW! PY5500
Native Resolutions	1920 x 1200	1366 x 768	Full HD 1920 x 1080	Full HD 1920 x 1080
Contrast Ratio (typical)	1000:1	1100:1	3500:1	4000:1
Viewing Angle (typical)	178° H, V	176° H/V	178° H/V	176° H/V
Brightness (w/o touchscreen)	400 cd/m ²	500 cd/m ² , LED Backlit	700 cd/m ²	450 cd/m ²
Power Consumption (typical)	135 W (2 W Standby)	135 W (2 W Standby)	<210 W (<1 W Standby)	250 W
Input Options	Digital (DVI-D w/HDCP), Analog (VGA), USB 2.0	HDMI or Fiber Optic	VGA, HDMI, DVI, RS232 and IR	VGA, HDMI
Power Requirements	100 ~240 VAC, 50-60 Hz	48 VDC	100 ~240 VAC, 50-60 Hz	100 ~240 VAC, 50-60 Hz
External Connections	(1) DVI-D 24-pin connector (1) Analog VGA D-sub 15-pin video display (1) USB Hub 4+1	(1) HDMI (2) RS232	(1) Analog VGA D-sub 15-pin video display (2) DVI-D 24-pin connector (3) HDMI (4) RS232 (5) IR	(1) Analog VGA D-sub 15-pin video display (2) HDMI 1.3c (3) RS232 D-sub 9 pin (4) SPDIF out
Power Supply	Internal w/IEC 320 connector North American and European cord sets included	External module with 2 pin connector, USA cord set, UL 60950-1 certified	-	-
Display Active Area (WxH)	21.750" x 13.625" (553 mm x 330 mm)	32" diagonal (930.24 mm x 523.26 mm)	42" diagonal	55" diagonal
Dimensions (WxD) (w/o bracket)	23.25" x 14.875" x 3.250" (591 mm x 378 mm x 83 mm)	31.96" x 20.55" x 0.78" (812 mm x 522 mm x 20 mm)	37.9" x 21.9" x 4.3" (963 mm x 555 mm x 110 mm)	51.6" x 30.8" x 5.5" (1310.6 mm x 781.4 mm x 138.6 mm)
Approvals	UL/cUL, CE, FCC-B, TUV/GS	UL/cUL, CE, FCC-A	FCC, EN60950, RoHS	FCC, EN60950, RoHS
Operating Temperature	5 to 40 °C	0 ~ -40 °C	0 ~ -40 °C	5 ~ -40 °C
Service and Support/ Warranty	1 Year	1 Year	1 Year	1 Year
Extended Warranty Package	Extends standard 1 Year warranty to a total of 3 Years (p/n 990-0068-00)	Consult Factory	Consult Factory	Consult Factory
Mounting Options	Rear mounting bracket, non-VESA pattern	Rear mounting, M4 and M6 threaded holes on back of display	Rear mounting, VESA standard 400 x 200 with M6 screw holes	Rear mounting, VESA standard 400 x 200; 400 x 600 with M8 screw holes



KIOSKS Sunlight-Readable

The LC Embedded Display product family, available from 10.4" to 46", are outstanding in sunlight installations. They are ideal for outdoor ATMs and digital signage, as well as ticketing, information and retail kiosks.

Outdoor displays need to be easily viewable in direct sunlight and must withstand solar loading.

PLANAR PROVIDES

1. Cooling kits and IR retarders for operation in extreme temperatures
2. Touchscreen flexibility - choose whatever technology you want
3. Customize a kiosk display

ASK US about
customization
and LED
Backlights



SPECIFICATIONS	LC1050XT	LC1503R	LC1913RTZ-C	LC2600R-C
Native Resolution	XGA (1024 x 768)	XGA (1024 x 768)	(1280 x 1024)	WXGA (1366 x 768)
Image Area	10.4" diagonal	15" diagonal	19" diagonal	26" diagonal
Video Input	LVDS, 1 channel	Analog; 15-pin D-sub	15 pin VGS, DVI-D	DVI
Luminance (typical)	1250 cd/m ²	1600 cd/m ²	1000 cd/m ² (without touchscreen) 900 cd/m ² (with touchscreen)	1000 cd/m ²
Contrast Ratio	900:1	600:1	500:1	800:1
Viewing Angle (typical)	160° H, V	160° H, V	140° H, V	160° H, 150° V
Power Consumption (typical)	<30 W	<20 W	62 W	100 W
Supply Voltage	+3.3 VDC	3/3V	+12 VDC	+12 VDC
Dimensions (WxHxD)	8.9" x 6.9" x 7" (227 mm x 174 mm x 18 mm)	12.9" x 10" x 1.2" (326.5 mm x 253.3 mm x 30.6 mm)	19.05" x 13.46" x 4.84" (4847 mm x 342 mm x 123 mm)	29.0" x 20.3" x 8.5" (737 mm x 514 mm x 216 mm)
Operating Temperature	-30 to +70 °C	-20 to +75 °C	0 to +50 °C	0 to +50 °C
Approvals	Consult Factory	Consult Factory	FCC-B, CE, UL, TUV, RoHS	FCC Class A, CE, UL/cUL, TUV, RoHS
Cooling	-	Internal fan. Optional cooling kit for solar loading abatement (model LC1503R-C)	Optional cooling kit for solar loading	Whisper quiet internal fan. Cooling kit for solar loading abatement
Power Supply	-	Consult Factory	Consult Factory	150 W external p/s included
Touchscreen Type	5-wire resistive with integral EMI shield	-	Projected Capacitive	-
Mounting Options	-	Side mounting points, 75 mm VESA compatible	Consult Factory	Side mounting points, 75 mm VESA compatible

Notes:

*Specified at CR≥5:1. All other LCDs specified at CR≥10:1. Visit planarembdedded.com/Digital-Signage for complete specifications.



DIGITAL SIGNAGE Sunlight-Readable

Planar's Digital Signage displays are ideal for mission critical applications like QSR outdoor menu boards and cinema outdoor digital signage. When requirements call for displays that are visible, beautiful and reliable in all kinds of weather, the LC3250 and LC4650 are outstanding solutions. With a wide temperature range, low power consumption and easy serviceability, they are extremely reliable and easily supported.

PLANAR PROVIDES

1. Off-the-shelf designs that survive in outdoor viewing applications
2. Customizable with touchscreens, bezels, cable assemblies, etc.
3. Cooling kits, IR retarders and optical bonding options to increase performance

ASK US about customization and LED Backlights



SPECIFICATIONS	LC3250	LC4650
Native Resolution	1366 x 768	1366 x 768
Image Area	32" diagonal	46" diagonal
Video Input	VGA, DVI-D	VGA, DVI-D
Data Input	RS232 for Smart Monitoring	RS232 for Smart Monitoring
Brightness	2000 cd/m ² (center)	2800 cd/m ² (center)
Contrast Ratio	3000:1	3500:1
Viewing Angle (typical)	178° H, V	178° H, V
Power Consumption (typical)	Consult Factory	Consult Factory
Line Voltage	120 VAC	120 VAC
Dimensions (WxHxD)	22.3" x 34.7" x 9.7"	29" x 47" x 10"
Operating Temperature	-30 to +50 °C	-30 to +50 °C
Surface Treatment	Anti-Glare 4.7 mm Bonded Tempered Vandal Glass	Anti-Glare 4.7 mm Bonded Tempered Vandal Glass
Approvals	UL48, FCC	UL48, FCC

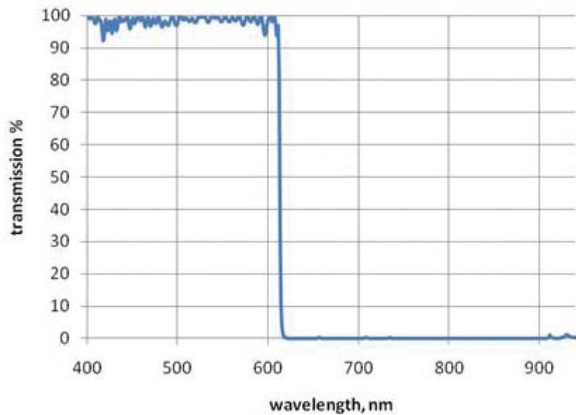
High Performance ALD Optical Filters - Suitable for EL and AMLCD



ITAR applies for NVIS filters

For over 27 years, Planar has used Atomic Layer Deposition (ALD) in production of electroluminescent (EL) displays. With this technology, it has been possible to create displays, which withstand harsh environmental conditions, are very reliable and rugged enough for the toughest display users' requirements.

Now, we are expanding this expertise in thin films to ALD interference filters, which are perfect of IR blocking in NVIS applications and can also be used for any spectral filtering in the VIS/NIR region.



What are the benefits to the users?

- No light leaking pinholes: filtering is complete
- High reliability: stable in extreme humidity and temperature
- Better uniformity than PVD films: optical performance more consistent on larger surfaces

	Absorption Filters	PVD - Interference Filters	ALD - Interference Filters
Cut-off Characteristics	Gradual	Sharp	Sharp
Uniformity	Good	Moderate/Good	Very Good
Environmental Stability	Good	Moderate/Good	Excellent
Non-flat Substrates	Yes (molded)	No	Yes
Cost	High	High	Very Competitive

PLANAR PROVIDES

Unique characteristics of ALD films:

- Virtually pinhole free
- High density resulting in high environmental stability
- Precise deposition control to an area up to 350 mm x 210 mm
- Even filters on uneven surfaces are possible

BENEFITS

- High transmission >90% in visible range
- Minimal color shift variation
- Steep and stable cut-off
- Up to OD 6 attenuation in NIR region
- Uniformity – no visible variations across the area
- Competitive cost