CONTRACTOR'S SPECIFICATIONS

Planar® UltraRes™ Series 4K LCD Displays

This document is to be used by an integrator, designer, consultant, or end user to develop specifications to a project utilizing a Planar® UltraRes™ Series 4K LCD display. Below you will find a table of product specifications for the Planar UltraRes Series models and unique specifications that can be used when designing and writing specifications. The table lists the feature category and the detailed specs. There is also a description of the main benefit, which usually does not appear in the bid but offers background and explanation on the requirement purpose.

Planar UltraRes Series 4K LCD Display Specifications

Planar UltraRes Series 4K LCD Display Models		
Feature	**Requirement**	**Benefit**
Specification List: Applies to UR7551-MX UR8651-MX UR9851	Resolution: 3840x2160 Aspect ratio (W:H) : 16:9 Brightness (maximum) : 500 candelas or nits Dynamic contrast ratio (full field) : 20,000:1 or better Full viewing angle : 178° External connections: DisplayPort 1.2 x1, HDMI 2.0 x2, HDMI 1.4 x2, OPS slot Support for 4K @ 60 Hz content HDCP 2.2 compliant Colors : >1 billion. Full 10 bit data path Color gamut: 72% NTSC or better Multi-Source view: PiP, Dual, Triple, Quad Display control: IR, RS-232, LAN, Keypad, Mobile app Backlight type : LED Backlight life (1/2 brightness) : 50,000 hrs typ. Support for both landscape and portrait orientation Speakers: 10W x 2 built-in or better Acoustic noise : Fan-less operation Operating temperature range : 0°-35°C Operating humidity range : 20-85% RH non-condensing Calibration control : by input (up to 6 inputs) Image adjustment: by input (up to 6 inputs) Power supply voltage: 100-240V AC, 50 to 60 Hz Mounting: Planar® Profile™ Mount; VESA compatible Power status: Diagnostics LEDs, health monitoring and alerts via email Remote access/control via web browser, over IP Integrated multi-touch model available Safety regulations: Complies with EN60950, FCC Class A, CISPR22/85, CE, EU RoHS	
Specification List- UR7551-MX	Diagonal Size: 75 inches Technology: Commercial-grade edge-lit LED LCD Response time (typical) : 6ms or better Heat load: 684 BTU per hour Power consumption : 200 watts (Typical)	

Specification List-UR8651-MX	Diagonal Size: 86 inches Technology: Commercial-grade edge-lit LED LCD Response time (typical) : 8ms or better Heat load:787 BTU per hour Power consumption : 230 watts (Typical)	
Specification List-UR9851	Diagonal Size: 98 inches Technology: Commercial-grade direct-lit LED LCD Response time (typical) : 8ms or better Heat load: 1402 BTU per hour Power consumption : 410 watts (Typical)	
Mounting		
Mount	The display must have an optional mount that allows the complete system to be mounted 4 inches or less from the wall	The Americans with Disabilities Act specifies that objects mounted on walls cannot protrude more than 4” from the wall surface.
Mount	The mount must have an integrated kickstand for easy access to inputs and removable service components	Allows for greater flexibility in attaching cables typically located behind the display
Orientation	The display must be capable of being installed in both landscape and portrait orientation.	Many displays can’t be mounted in portrait orientation, or they are not warranted for portrait mounting.
Environmental		
Noise	The display must utilize a fan-less LCD design.	Most LCDs have built-in fans that have measurable decibel levels at the wall. This is distracting and intolerable in quiet environments.
Operating Temperature	The display must be able to operate in a 0-35°C (32-95°F) environment.	
Operating Humidity	The display must be able to operate in a 20-85% RH non-condensing environment.	
Electronics and Image Processing		
Connectivity	The display must have at least 2 HDMI 2.0 and at least 2 HDMI 1.4 inputs as well as at least 1 DisplayPort 1.2 input	
4K @ 60 Hz	The display must show 4K @ 60Hz content natively via both HDMI and DisplayPort	4K @ 60Hz support enables smooth motion video and mouse tracking as compared to displays limited to 4K @ 30Hz output

		Most 4K displays don't offer 4K at 60Hz support through both DisplayPort and HDMI
Scheduling	The display must have a real time clock integrated into the electronics to allow for scheduled Power On and Off.	This allows the display to be turned on and off during regularly scheduled hours. It can also help prevent panel damage.
HDCP Compliance	The display must be HDCP 2.2 compatible with sources requiring HDCP 2.2 such as streaming services – i.e., Netflix.	
IR Remote Control	The display must have IR remote control that can control an individual display. The display must be capable of setting a unique unit identification number for acceptance of unit specific IR commands.	This simplifies the installation and maintenance of the system. It provides a very simple control for an end-user, similar to the menu of a TV set.
Integrated OPS expansion slot	The display must have integrated OPS slot	This allows OPS-compatible devices – such as media players, PCs – to be embedded inside the display, eliminating the need for an external box
Memory Slots	The display must contain memory slots so that image settings and/or layouts can be recalled quickly and easily.	Recalling a saved setting is quick and helps ensure proper setup.
Auto Setup Options	The display must be able to automatically detect and sync to any incoming selected source within the specified operating range without user intervention.	This plug and play feature saves time and reduces labor requirements.
RS232	The display must be capable of accepting RS-232 control commands. The display must be capable of setting a unique unit identification number for acceptance of unit specific RS-232 commands.	This standard communication protocol provides the capability of controlling the display or tiled configuration with a single communication controller.
Color Temperature presets	The display must include selectable presets that allows for color temperature settings of at least 6500, 3200, and native.	Adjusting color temperature digitally prevents the extra cost of color filters.
LAN Control	The display must have a built-in option for health monitoring of the display including current status and email alerts over a LAN.	This allows for health and status monitoring over the Internet and allows operators to take a proactive service approach.

SNMP	The display must have SNMP capability.	SNMP is an internet-standard protocol for managing devices on IP networks. It allows for easy integration with existing systems and tools.
Compatibility Mode Table	The display must be capable of accepting over 70 different mode timings and syncing without user intervention.	This prevents the need for and cost of a special timing programming.
Diagnostic LED's	The display must incorporate diagnostic and status LED's that aid with setup and troubleshooting.	These indicators save time and labor cost.
Scaling Capabilities	The display must be capable of accepting input resolutions of VGA (640x480) to UHD (3840x2160) and scaling an image across tiled configuration	Built-in scaling prevents the cost and complexity of adding a third-party video processing solution.
LCD Module		
Commercial Grade LCD Module	The display must use a commercial grade LCD module	A commercial grade LCD is resistant to image sticking and other long term aging affects.
Viewing Angle	The display must have a horizontal and vertical viewing angle of 178°	
Resolution	The display must have a native resolution of 3840 x 2160	
Other		
24-hour advanced exchange policy	The display manufacturer must offer a service policy that allows a replacement LCD to be shipped out within 24 hours.	
Redundant power supply	The display must have a back-up power supply so that does not go dark should the primary power supply fail	
Multi-Touch support	An integrated up to 32-point touch system must be available with the display. Touch Overlays are not acceptable.	
Vandal-resistant glass option	The Extended Ruggedness & Optics (ERO) option must be available with both the non-touch and touch display options which protects the glass, and improves the optics, while creating a smooth touch surface	Rugged, durable display
App	The display must be able to be controlled from an app installed on a mobile device	Convenient display control