

# Christie Entero LED Series



◀ Christie RPMSP-LED01

## Solid-state technology. Zero maintenance design. SXGA+, HD and WUXGA Entero LED rear screen video wall display projectors.

You expect quality. You need an effective solution that works reliably 24/7, no questions asked. For more than 30 years, Christie® has been manufacturing high performance rear projection video wall engines and display systems that allow you to maximize your efficiency and response time when monitoring or managing critical real-time information and situations.

Designed for new video wall systems, such as cubes or structures, and also upgrading existing video wall systems without having to replace the entire system, Christie's rear screen video wall display projectors are the engines that drive high performance video walls. Christie's video wall projectors are purpose built for 24/7 data monitoring environments and come in a wide range of resolutions and display sizes.

Packed with industry firsts and using solid-state technology, this series is virtually maintenance free. An industry leader, the Christie Entero™ LED Series offers ultra-high resolution, extraordinarily long life, 24/7 reliability and demanding performance quality. It employs the latest in rear screen display technology and offers a worry-free, cost-effective solution for control room and video wall displays. The Christie Entero LED Series will exceed your expectations.

# The Christie Entero LED Series is the ultimate video wall display solution

## Purpose built for high performance

Vivid color presentation – wider color gamut than traditional mercury based lamps  
 DLP® technology for best data and video imaging  
 Integrated 6-axis adjustment system for precise geometry alignment  
 Industry leading WUXGA (1920 x 1200), HD (1920 x 1080) or SXGA+ (1400 x 1050) resolutions available  
 ArrayLOC™ – intelligent automatic brightness and color management  
 Sealed optical design – no filters required  
 Innovative cooling system with heat pipe technology – no motorized heat pumps, no hazardous fluids, no annual maintenance  
 The best technologies used to ensure high reliability and long life  
 Geometric precision for seamless imaging across multiple displays  
 Reduced disruption because there are no consumable components to replace  
 Very wide color gamut for superior color reproduction  
 Ultra high contrast, viewability and display performance

## Purpose built for an overall low cost of ownership

Zero maintenance design – no consumable components such as lamps, dust filters or color wheels  
 Solid-state design – no arc lamps, motorized color wheels, motorized heat pumps or mechanical apertures  
 >60,000 hours rated LED life  
 Modular design for minimal downtime if repair is required  
 Overall system provides up to six years of worry-free performance  
 Designed for long-term use and performance – no need to replace in a few years

## Purpose built for reliability

>50,000 hours MTBF on major modules  
 DLP display technology for superior long term performance and reliability  
 Reduced disruption because there are no consumable components to replace  
 Christie's industry-leading service and support  
 Dust-free sealed optics protect key optical components from even the smallest of particles



▲ Our integrated 6-axis adjustment system enables precise geometry display and alignment of your video wall.

## Low cost of ownership/operation

The Christie Entero LED Series has a lower cost of operation than all other lamp-based systems. There are no consumable components to replace such as lamps, filters or color wheels, which means there is virtually zero maintenance required. The rated life of the LED illumination module is 60,000 hours (over 6½ years). Christie's high-reliability design reduces the risk of component or system failures. The only moving parts within the Christie Entero LED system are three sets of cooling fans (each set has one redundant fan to reduce any downtime).

## Limited wall disruption

With no consumable parts to replace, there are limited service disruptions to the wall. The ArrayLOC feature ensures automatic color and brightness management to reduce the need for frequent color and brightness recalibrations. By and large, the system is virtually "maintenance free".

## Purpose-built 24/7 features

The Christie Entero LED Series incorporates all the typical purpose-built features of Christie's 1-chip DLP control room products.

### Features such as:

A modular design for fast and easy servicing  
 High mean time between failure (MTBF) and low mean time to repair (MTTR)  
 Precision short throw lens  
 Christie's KoRE™ electronics platform including multiple input capability and Picture-in-Picture; continuous diagnostic monitoring and notification via LED status display, serial or Ethernet (email notification)  
 An integrated 6-axis adjustment system for precise geometry display and alignment  
 Full display control via keypad remote  
 GPIO, Ethernet or RS-232 networks  
 Dust-free sealed optical design  
 Extensive display parameter and configuration controls

## Automatic color and brightness management

Christie's projection products are factory calibrated for precise color and brightness control, providing complete flexibility and ease for color and brightness setup. However, when multiple displays are tiled into a seamless array, it is critical that color and brightness are matched across the array and that it remains balanced in the long term. The Christie Entero LED Series includes ArrayLOC which provides intelligent automatic brightness and color management thus minimizing the need for human intervention and wall disruption. All projection displays in the video wall array communicate with each other via Ethernet to ensure consistent matching. No external computer or controller is required to assist in-wall monitoring.

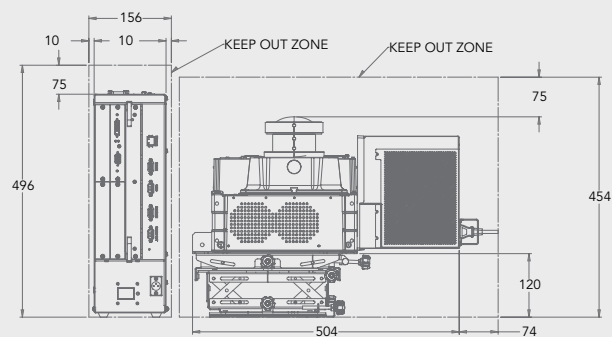
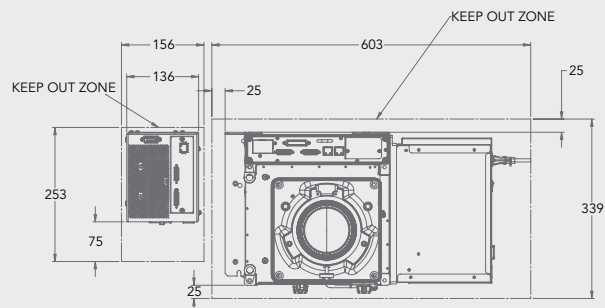
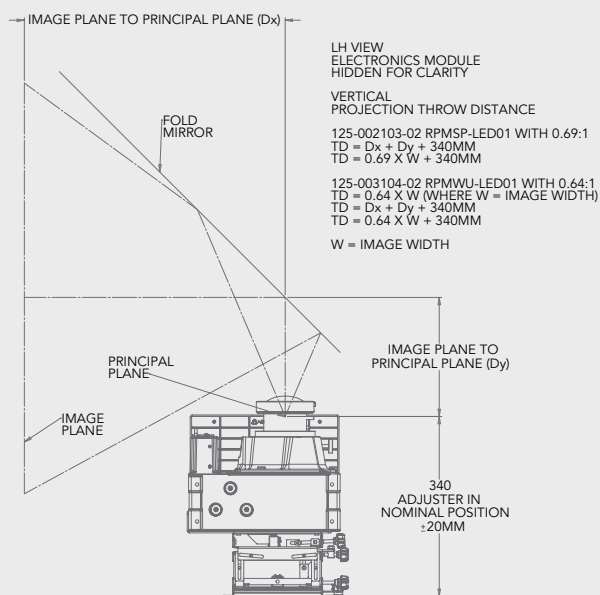


# Technical specifications

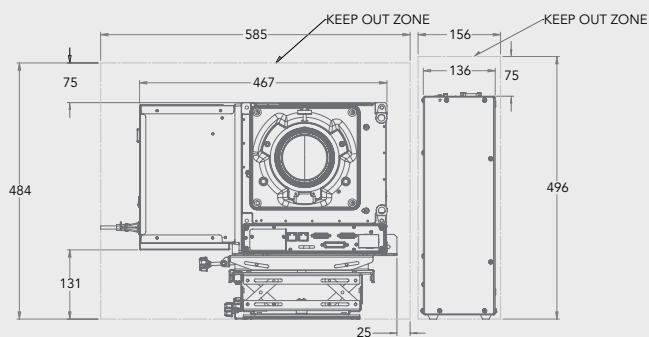
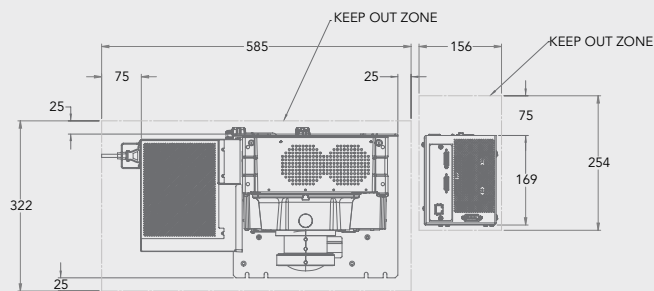
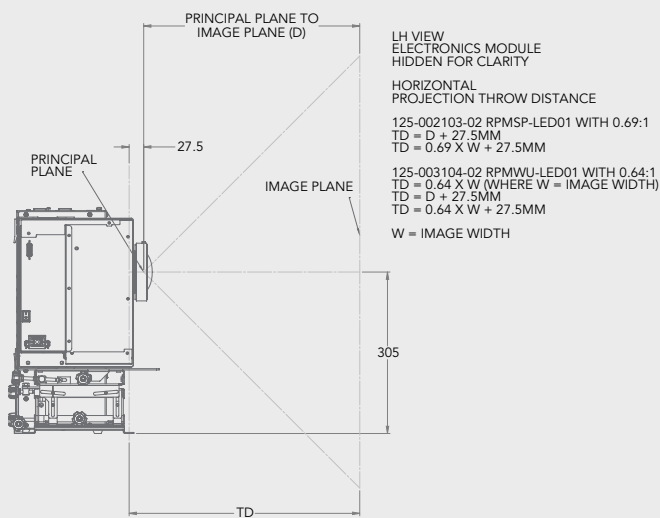
		RPMSP-LED01	RPMHD-LED01	RPMWU-LED01
Imaging technologies	imaging	• 1-chip DLP	• 1-chip DLP	• 1-chip DLP
	native resolution	• SXGA+ (1400 x 1050)	• HD (1920 x 1080)	• WUXGA (1920 x 1200 – HD compatible)
	illumination	• Light Emitting Diodes (Red, Green, Blue)	• Light Emitting Diodes (Red, Green, Blue)	• Light Emitting Diodes (Red, Green, Blue)
Standard cube options		• 50" (24" depth) • 67" (30" depth) • Other sizes available built to order	• 70" (35" depth)	• 72" (33" depth) • Other sizes available built to order
Inputs	standard	• Digital DVI-I with analog VGA		
	scan rates	• Horizontal: 15-120kHz • Vertical: 23.97-150Hz • Pixel clock: 165 MHz		
	expansion	• 3 input module slots available		
	optional modules	• VGA, Digital (DVI), Analog (RGB), dual SDI/HDSI, twin HDMI		
	compatibility	• Compatible with Christie TVC Series display wall controllers or other input sources from VGA to QXGA as well as standard HD formats		
Illumination	technology	• LED (RGB)		
	LED life rating <sup>1</sup>	• >60,000 hrs		
	brightness <sup>2</sup>	• 600 ANSI lumens	• 540 ANSI lumens	• 600 ANSI lumens
Color	temperature range	• 3200-9300K		
	gamut	• Beyond 100% EBU		
	adjustment and control	• Screen to Screen: ArrayLOC automatic brightness and color management • Individual: Comprehensive Color Adjustment (CCA™)		
Optical	lens type	• Low distortion zero offset short throw fixed lens with field curvature correction (0.69:1 throw for SXGA+, 0.64:1 throw for WUXGA)		
	screen size range	• 40-100" diagonal		
	brightness uniformity	• Brightness uniformity control provides up to 100% uniformity capability for critical applications		
	contrast ratio <sup>3</sup>	• >100,000:1 (shutter mode) • 1400:1 (full field)		
Control/networking	ports/controls	• 2 RS-232 ports and 1 RS-422 port • Field upgradable software via RS-232 network or Ethernet • IR remote control • GPIO port • On-board ChristieNET™ connectivity (RJ45)		
Upgradability	software	• Christie KoRE 10-bit librarian communication software for field upgrade of firmware		
Optional Accessories	inputs	• See input option modules above		
	other	• Wired remote control		
Physical characteristics	dimensions	• See included line drawings		
	weight (approx.)	• 60lbs (27kg)		
	shipping weight (approx.)	• 68lbs (31kg)		
Environment	operating temperature <sup>4</sup>	• 40-95°F (5-35°C)		
	non-operating temperature	• -4-122°F (-20-50°C)		
	humidity	• 20-80% non-condensing		
	altitude	• 0-3000m (0-10,000ft)		
Power rating (projection engine)	voltage	• 100-240 VAC 50/60Hz		
	current	• 4.5A		
	consumption	• Rating: 370W		
	dissipation (maximum)	• 1263 BTU/hr		
Reliability and serviceability	MTBF	• >50,000 hrs MTBF for all major modules		
	MTTR	• <15 minutes with modular design • >5 minutes for lamp		
Regulatory approvals		• Directives: (EC) 2002/95/EC (RoHS) • 2002/96/EC (WEEE) • Regulation (EC) No. 1907/2006 (REACH) • CAN/CSA C22.2 No. 60950-1 • UL 60950-1 • IEC 60950-1 • FCC, Part 15, Subpart B, Class A • EN55022/CISPR22 Class A • EN55024/CISPR24 • Certifications marks (check with Christie for latest update): • cULus (Canada & US) • CE (EU) • CCC (China) • GoST-R (Russia) • KC (Korea) • PSE (Japan) • C-Tick (Australia & New Zealand)		
Calibration		• All projection units are factory calibrated for best color performance		
Limited warranty		• Two years parts and labor • Contact an authorized Christie representative for full details of our limited warranty		
Additional features and benefits		• Integrated 6-axis adjustment system for precise geometry alignment • Full-function remote keypad with easy-to-use menu system • Multiple setup memories to manage multiple input sources • Picture-in-Picture capability • Control and status monitoring over IP • Extensive scaling capability • Window/screen processing – external inputs can be displayed across an array of screens up to 3x3 without an external processor (a single input must be distributed to all cubes or it can be daisy-chained via use of the cube's optional Twin HDMI module) • 3 x Redundant cooling fans • Innovative water-filled, sealed heat pipe cooling system (maintenance free, no motorized pumps, hazardous chemicals or concern of leakage)		

<sup>1</sup> LED lifetime is based on expected useful life (50% of original brightness). <sup>2</sup> Brightness specifications are at reduced color space settings. <sup>3</sup> The contrast ratio specified is the "natural" contrast ratio measured by both full field and ANSI methods. Such values are critical for proper contrast performance assessment – especially for video walls. <sup>4</sup> For best long-term performance and reliability, Christie recommends that all electronic equipment, such as projection systems, are regularly operated at temperatures below 77°F (25°C).

## Vertical lens configuration



## Horizontal lens configuration



Notes: A. Dimensions are millimeters B. Adjuster is in neutral position C. Stay out zone required for air flow, adjuster range, cable routing and service D. Projection distance tolerance  $\pm 1.5\%$   
 E. The electronics module is shown in nominal position relative to projector's body it can be relocated to the left up to 50, and  $\pm 20mm$  back and forth from nominal position.

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For the most current specification information, please visit [www.christiedigital.com](http://www.christiedigital.com)

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