




2026

PRODUCT BOOK

Make powerful first and lasting impressions with direct view LED displays and video walls

Impress. Inform. Inspire.

Let's bring wonder to
physical spaces, together.



Proven Solutions. Trusted Relationships.

With best-in-class LED innovation, collaborative project design, unmatched attention to detail and a passion for witnessing the awe of a job well done, we're dedicated to fulfilling your vision while keeping an eye on the big picture.



Engage Pro Series

High contrast Chip-On-Board MiniLED display for indoor applications



For fine-detail visualization in control rooms, executive boardrooms and other environments that require the highest levels of image performance, the ultra-fine pixel pitch Engage Pro Series is unrivaled. This premium cabinet-based MiniLED display's COB architecture delivers the deepest black levels with more than 4x the contrast of traditional SMD LED displays, while maximizing energy efficiency. Its COB coating also minimizes reflections, enabling specification in brighter environments. With 16:9 format cabinets Engage Pro displays can be easily configured for popular Full HD or 4K resolution content, while its 0.7mm - 1.25mm pixel pitches support comfortable viewing from as close as five feet. Engage Pro is TAA Compliant and backed by Nanolumens' Nixel to Pixel Warranty.

SPECIFICATIONS



INDOOR



FLAT



SLIM

100K
HOURS

LIFETIME

TAA

COMPLIANT

Pixel Pitch	0.7 mm	0.9 mm	1.25 mm
Max Brightness (Standard)	800 nits		
Form	Flat		
Processor Compatibility	Aurora / Megapixel VR / Novastar		
Warranty	8 Years		



Engage Series

Simple, high-detail SMD LED cabinet display for flat or faceted indoor video walls.



Elevate your conference room, lobby or lecture hall with a premium fine pixel pitch Engage Series video wall, ideal for close-distance viewing where image clarity is a priority. Engage is a Surface-Mounted Device (SMD) LED display compatible with leading video processing solutions, including Nanolumens' Aurora. With a slim, lightweight, stackable 16:9 aspect ratio cabinet, Engage makes it easy to showcase Full HD or 4K content. To minimize downtime and infrastructure impact, it offers front-side installation and service. Plus it's backed by Nanolumens' industry-leading eight-year Nixel to Pixel warranty!

SPECIFICATIONS



INDOOR



FLAT



SLIM

100K
HOURS

LIFETIME

TAA

COMPLIANT

Pixel Pitch	0.9 mm	1.2 mm	1.5 mm	1.8 mm	2.5 mm
Max Brightness (Standard)	700 nits			800 nits	1200 nits
Form	Flat				
Processor Compatibility	Aurora / Megapixel VR / Novastar				
Warranty	8 Years				



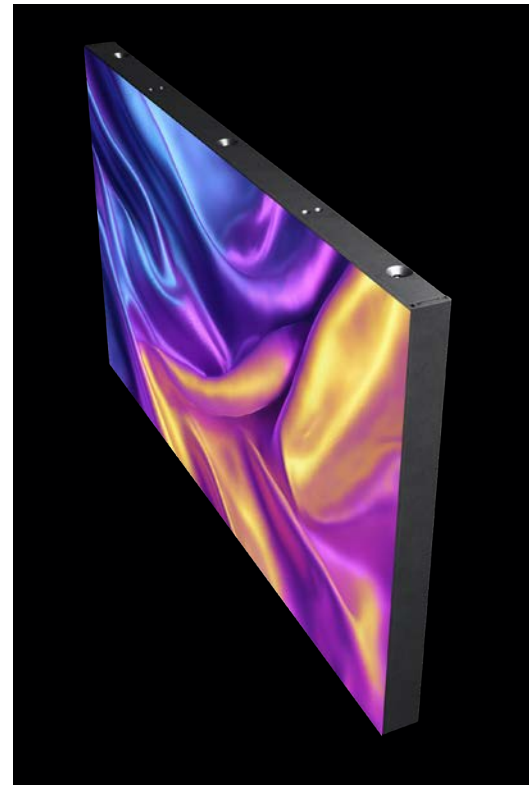
NXT Series

Indoor LED cabinets for impressive visualization projects on tighter budgets.



When organizations require impactful, large-format, indoor digital signage or meeting room video walls on a budget, Nanolumens' entry-level NXT Series direct view LED displays are the wise choice.

These versatile displays delivering stunning image quality, reliable performance, and streamlined installation at unmatched value. Available in both COB and SMD models, it offers pixel pitch options from 0.9mm - 2.5mm and 16:9 format cabinets for popular Full HD and 4K content.



SPECIFICATIONS



INDOOR



FLAT



SLIM

100K
HOURS

LIFETIME

TAA

COMPLIANT

Pixel Pitch	0.93mm COB	1.2mm COB	1.5mm COB	1.2 mm SMD	1.5 mm SMD	1.8 mm SMD	2.5 mm SMD
Max Brightness (Standard)	800 nits						
Form	Flat						
Processor Compatibility	Novastar						
Warranty	3 Years / 5 yr extended						



NanoPanel 55

Affordable LED upgrade for 55" LCD flat panels.

The NanoPanel 55 is a drop-in LED replacement for legacy 55-inch standalone LCD displays and tiled video walls; transforming airports, stores, campuses and restaurants with vibrant, high-contrast, reflection-free flight schedules, menu boards or wayfinding signage, and unmatched longevity.

Mount NanoPanel 55 in landscape or portrait orientation as a standalone display or remove the trim for near-seamless tiled video walls. With standard VESA mounting and convenient HDMI connectivity, it seamlessly integrates into existing infrastructure, enabling organizations to upgrade, without reengineering display networks.



SPECIFICATIONS



INDOOR



FLAT



SLIM

100K HOURS

LIFETIME

Size/Dimensions	55" Class 23.62 in x 13.29 in
Resolution	Full HD (1920 x 1080)
Pixel Pitch	0.6mm
Max Brightness (Standard)	800 nits
Mounting	VESA 400x400 Standalone or Tiled Landscape or Portrait
Warranty	3 Years

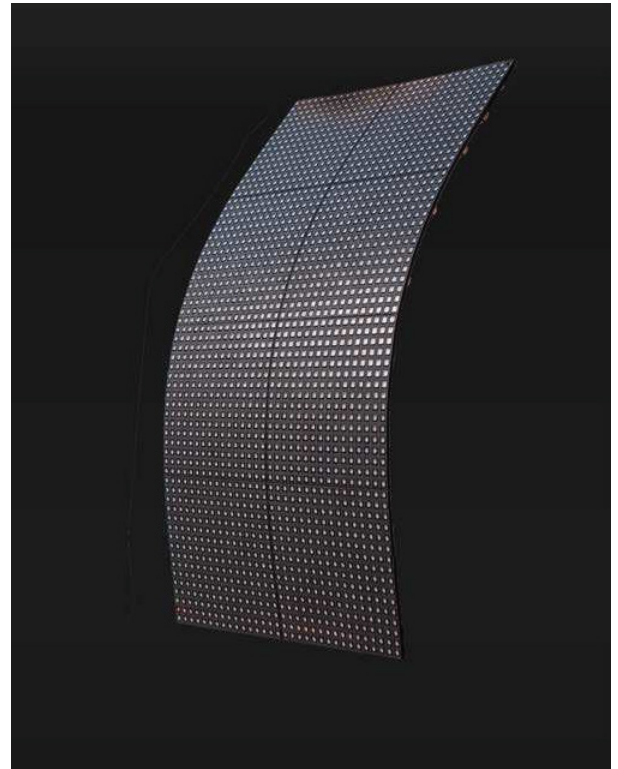


Nixel Series

Curveable indoor displays engineered for the perfectly-smooth mount-free fit. The Original True Curve™

With limitless customizability and unrivaled performance, the indoor Nixel Series gives you the creative freedom to transform any flat, curved, combination, or column surface with an immersive display experience for ambiance or digital signage.

Whether a project calls for convex or concave curves, or a bit of both, the flexible Nixel Series with True Curve technology and a skin and frame topology can meet your demands. Flexibility is in the name.



SPECIFICATIONS



INDOOR



CURVABLE /
CUSTOMIZABLE

100K
HOURS

LIFETIME

TAA

COMPLIANT

Pixel Pitch	0.9 mm	1.2 mm	1.5 mm	1.8 mm
Max Brightness (Standard)	1000 nits	770 nits	750 nits	800 nits
Form	Flexible Curve or Flat			
Processor Compatibility	Megapixel VR / Novastar			
Warranty	6 Years			

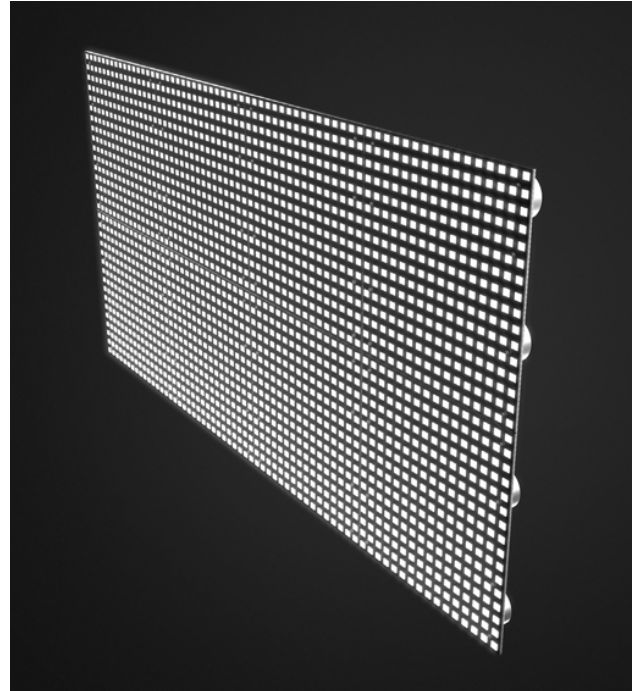


Nixel Series Outdoor

Curved or flat, outdoor displays transform any environment into a visual experience.

This weatherproof line is designed for smoothly curved or flat outdoor display applications. Its frame and skin topology has an IP65 Ingress Protection Rating, making it dust and water tight for use in hot, dry or wet and cool climates.

Create displays and video walls of nearly any shape or size, with concave or convex curves, including column wraps.



SPECIFICATIONS



OUTDOOR



CURVABLE /
CUSTOMIZABLE

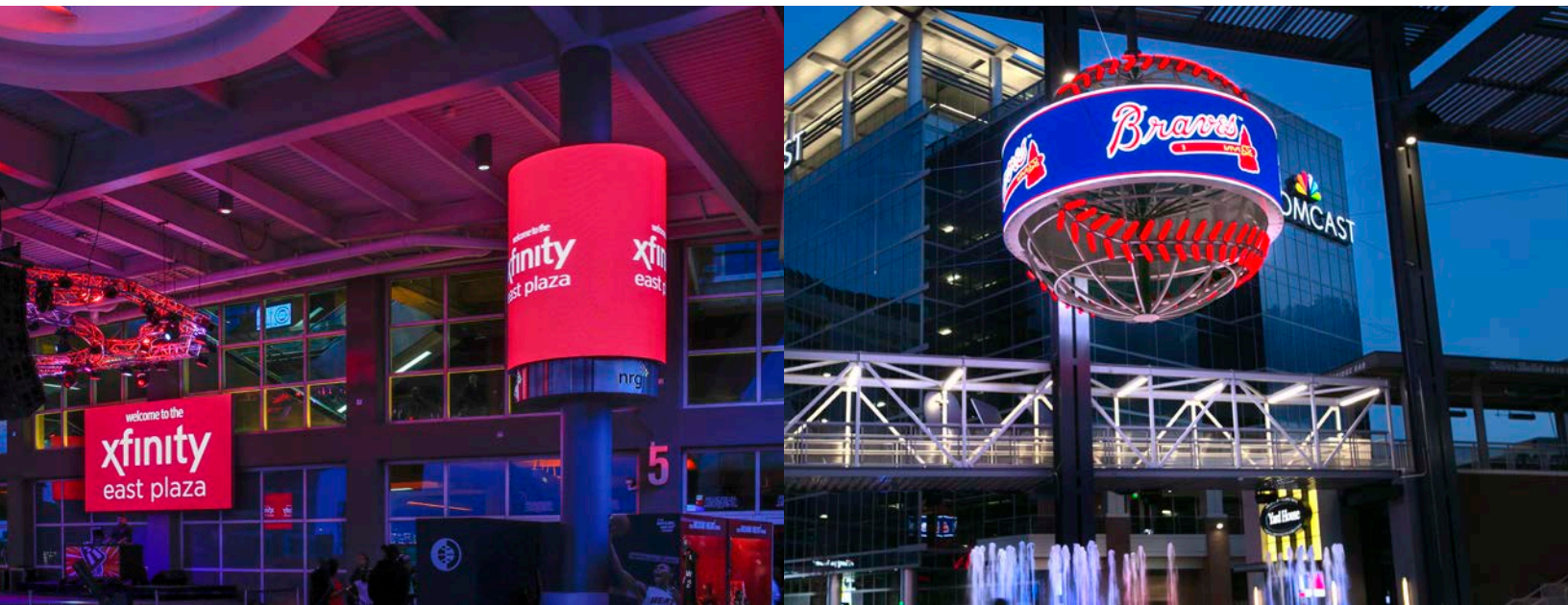
100K
HOURS

LIFETIME

TAA

COMPLIANT

Pixel Pitch	4.7 mm	6.3 mm	9.5 mm
Max Brightness (Standard)	5200 nits	6500 nits	
Form	Curveable		
Processor Compatibility	Novastar		
Warranty	6 Years		



Captivate Series

All-In-One 135" - 165" COB LED displays with audio, processing and fast setup.

Aimed at simplifying user control and speeding installation, Captivate is the easiest and fastest way to enjoy the beauty and reliability of a standard format, high resolution dvLED display in corporate meeting rooms, lobbies, houses of worship and higher education facilities.

Captivate is a complete solution with an on-board Android OS, built-in video processing and a 6-speaker audio system, all of which eases the design and installation costs typically associated with deploying LED displays. Captivate Series is available in three unique sizes: the Full HD resolution 135" and 165" and 4K UHD 162".



SPECIFICATIONS



Display Diagonal	135"	162"	165"
Resolution	Full HD (1920 x 1080)	4K (3840 x 2160)	Full HD (1920 x 1080)
Pixel Pitch	1.5 mm	0.9 mm	1.9 mm
Max Brightness (Standard)	600 nits		
Key Features	Android OS, Embedded Processing, 6-Speaker Audio, 3x HDMI, PIP, RS-232 Controls, UC&C Compatible		



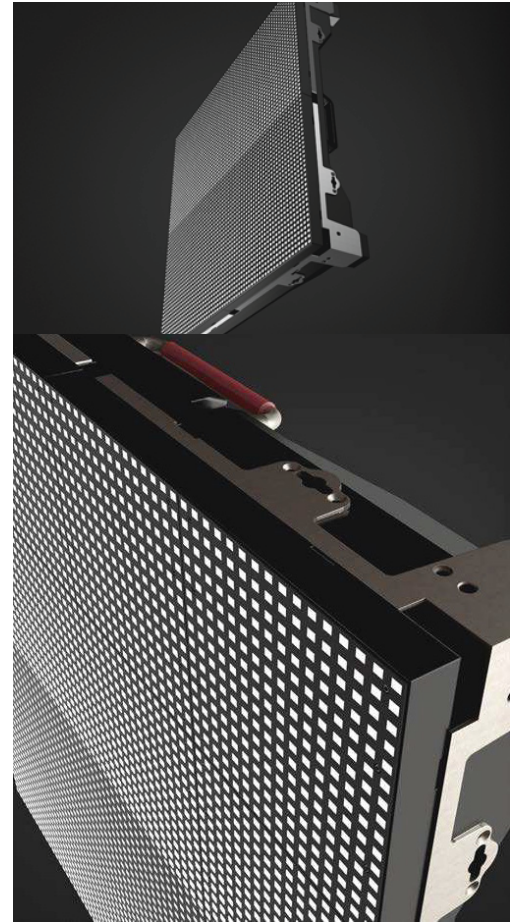
Performance Series

Versatile outdoor displays that light up the outside world, day and night.

Nanolumens fully outdoor rated, and highly adaptable cabinet-based LED displays can be tailored to form clean, seamless create any structures imaginable. Available in square 500x500mm or 250x250mm form factors, configure the Performance series to nearly any rectangular size or shape.

All mounting brackets and structures are integrated into the frame design, allowing wall-mount, free-standing, hanging/tethered, or cantilevered mounting without any additional structures required.

Designed and tested to stand up to all weather conditions without internal environmental controls, Performance Series gives you the ability to transform any outdoor space, and is backed by our industry-leading Nixel to Pixel warranty.



SPECIFICATIONS



100K
HOURS
LIFETIME

TAA
COMPLIANT

Pixel Pitch	3.1 mm	3.9 mm	5.9 mm	8.3 mm	10.4 mm
Max Brightness (Standard)	6000 nits	5500 nits			
Form	Flat				
Processor Compatibility	Novastar				
Warranty	3 Years / Option to Extend 1 Year				

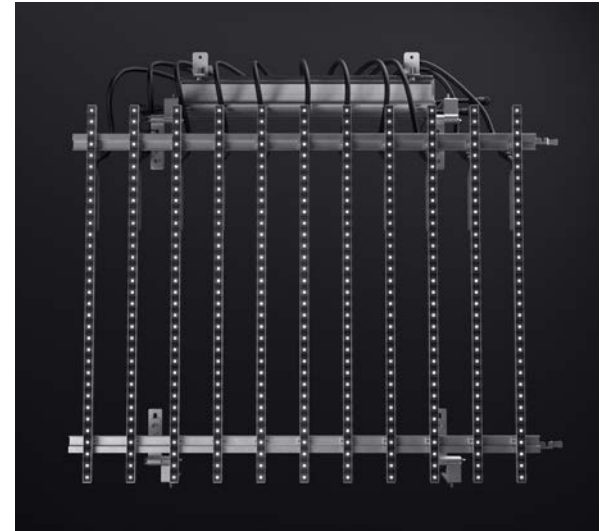


CLRVU Series

The building-hugging display that rises to the occasion.

CLRVU transparent, outdoor mesh-based LED displays create high-impact visuals on the outside while providing transparency for occupants inside. Available in a variety of pixel pitches and bar spacing, this technology arranges high brightness LED components into individual modular bars, then assembled into a larger display, minimizing any obstructions.

Each display is design built to seamlessly blend into the architecture of a building while allowing the customization of resolution, power consumption, and transparency. Designed to be curtain view mounted, CLRVU Series is the ultimate solution for large statements without sacrifice.



SPECIFICATIONS



OUTDOOR

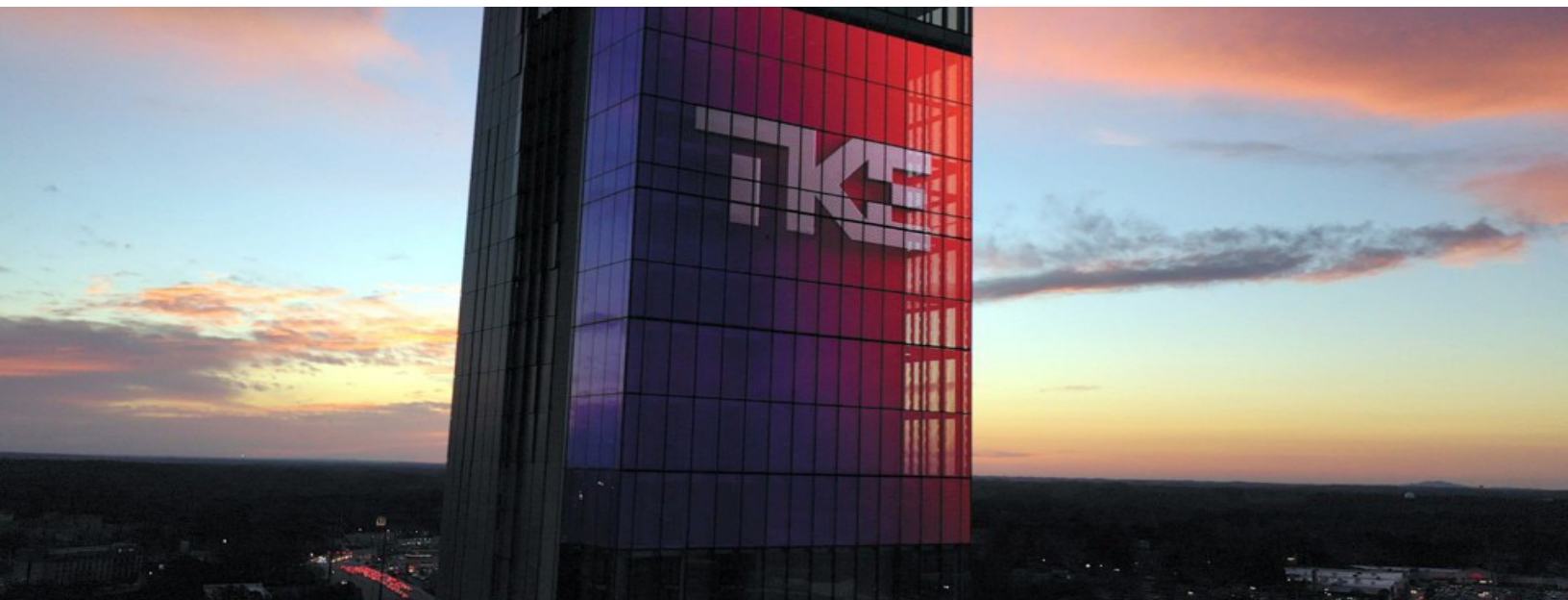
100K
HOURS

LIFETIME

TAA

COMPLIANT

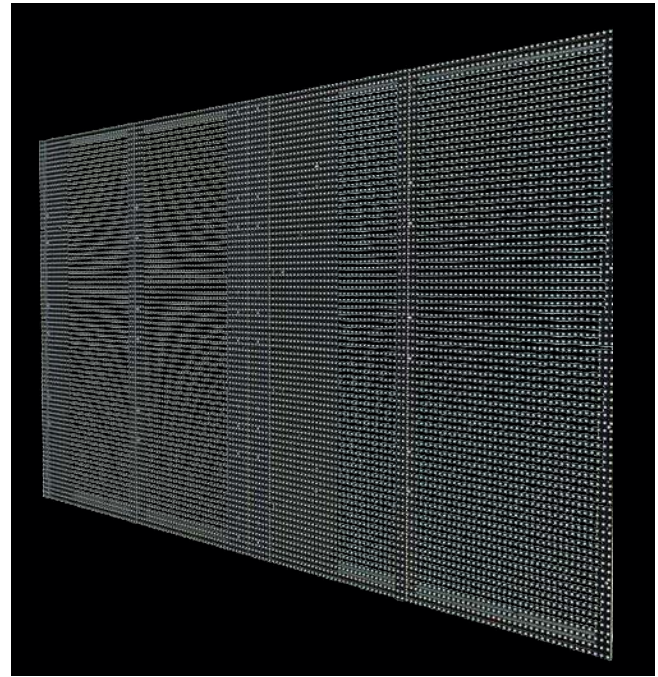
Pixel Pitch	10 mm	12 mm	15 mm	18 mm	20 mm	25 mm
Max Brightness (Standard)	6000 nits					
Form	Flat					
Processor Compatibility	Novastar					
Warranty	3 Years					



CLR Vision Series

Clear, Creative, Impact.

Nanolumens' CLRVision indoor transparent mesh LED displays deliver eye-catching visuals, while retaining the beauty of an environment's architectural design. With a wide range of pixel pitches from 3.8-10mm and up to 3000-nit brightness, CLRVision creates high impact views in any space with minimal effect on the view from the other side. The displays are made with high-quality components to ensure your brand message is as clear today as in the years to come. And servicing is no hassle, as each individual LED strip can be easily serviced from the front or rear of the display.



SPECIFICATIONS



INDOOR

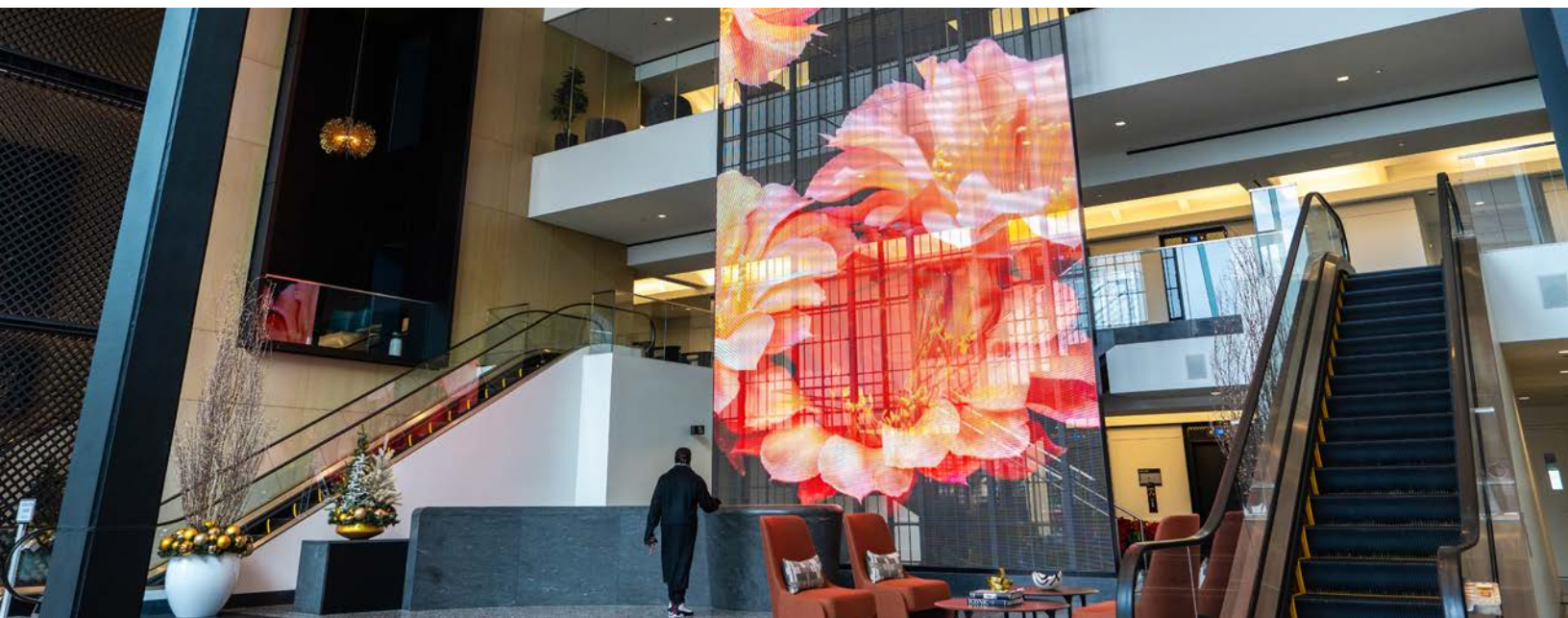
100K HOURS

LIFETIME

TAA

COMPLIANT

Pixel Pitch	3.9 x 7.8	6.2 x 6.2	7.8 x 7.8	10.4 x 10.4
Max Brightness (Standard)	3000 nits			
Form	Flat			
Processor Compatibility	Novastar			
Warranty	3 Years			



NanoSuite

Remote monitoring and management
designed by operators for operators



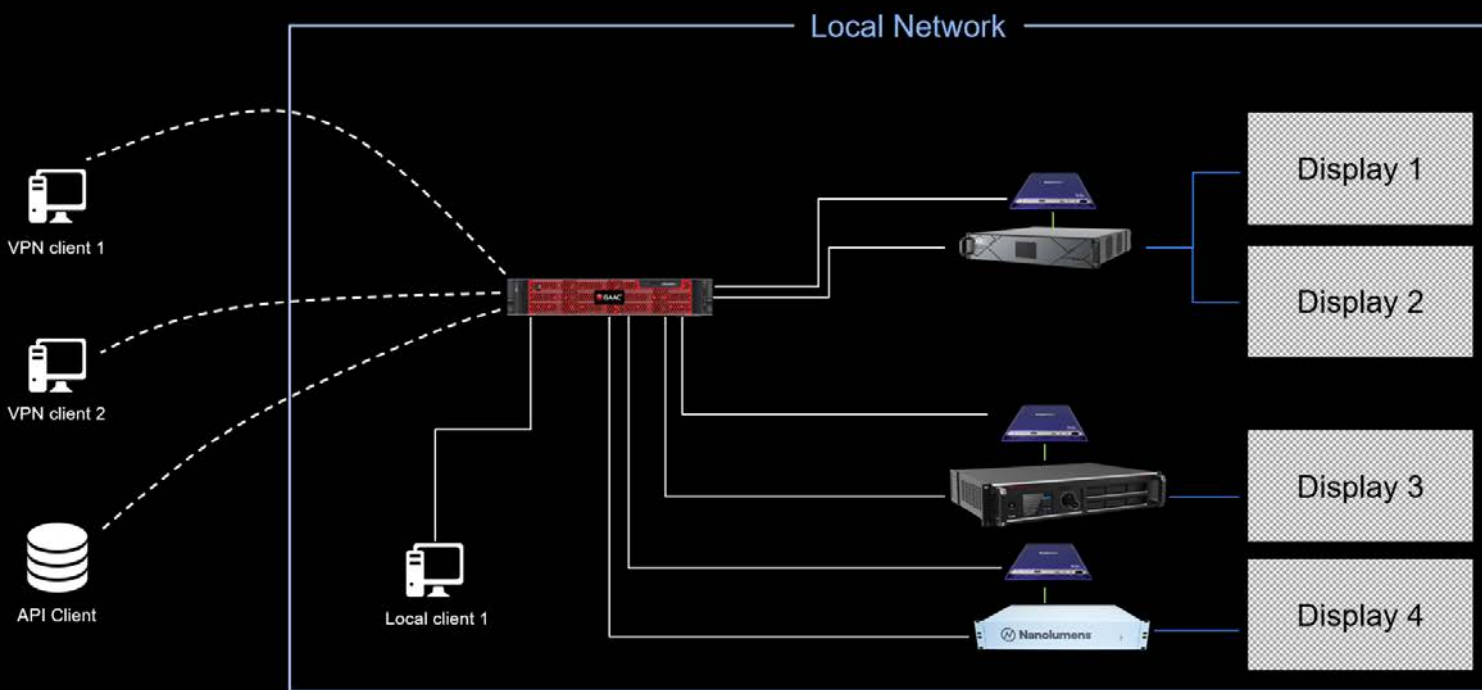
Nanolumens' NanoSuite RMM software module is built to work within Smart Monkeys' ISAAC® hardware platform, which delivers an all-in-one unified interface for entire AV Systems with access, monitoring and notifications, scheduling and content management, along with virtual machine hosting for modern, multi-technology AV ecosystems.

With NanoSuite operators can use a single-pane-of-glass web-based interface to monitor displays' real time and historical performance, and troubleshoot issues. Operators can use NanoSuite via desktop or mobile; on-premises (OnPrem), via API, or through remote access.

NanoSuite's X Center integrates with a number of popular LED processing platforms, including Nanolumens' Aurora Video Processor.



System Architecture



Aurora Video Processing

Secure, Smart, Seamless dvLED Control

Aurora isn't just a video processor – it's the culmination of purpose-built engineering, creative freedom, and operational mastery. Whether you're building immersive brand experiences or mission-critical systems, Aurora gives you unmatched precision, reliability, and control.

To maximize data safety and security, the Aurora processing package is independently compliant with U.S. Trade Agreements Act (TAA) statutes.

Unique Lightweight Directory Access Protocol (LDAP) compatibility for Active Directory-based systems lets organizations manage Aurora user authentication and permissions through existing network security frameworks.

Aurora's 23-bit color standard and shading at virtually any brightness level. Long screen time doesn't demand eye strain. Aurora uses a proprietary scan algorithm to reduce eye fatigue during extended viewing periods, without compromising visual clarity.

Its file-less, click and go architecture means no more managing, matching, and loading configuration or calibration files making management and service a breeze. With 50 percent less cabling, Aurora operates at twice the bandwidth of standard video processing solutions, reducing facility impact and time on site.



Display Processing Unit		Processing Control Unit	
Processor Control	1x GbE RJ-45 to PCU	Connectivity	2x LAN: (1) Mgmt Access (1) DPU Network 2x USB 3.0 2x USB 2.0
Inputs	1x HDMI 2.0 (type A), 1x DP1.4	Power	DC: 19V, 3.42
Input Capabilities	Progressive RGB and YCbCr 4:2:2 and 4:4:4 Supports input bit depth up to 12 bpc Refresh frequencies: 23.98 Hz, 24 Hz, 25 Hz, 29.97 Hz, 30 Hz, 47.95 Hz, 48 Hz, 50 Hz, 59.94 Hz, 60 Hz, 100 Hz, 119.88 Hz, 120 Hz, 144 Hz, 240 Hz HDCP 1.4, HDCP 2.2, HDCP 2.3*	Power Consumption	65W
Outputs	8x SFP 1-8	Heat	221 BTU/h
Dimensions	1/2 Rack, 7" x 8.75" x 1.7"	Dimensions	1/2 Rack, 7" x 8.75" x 1.7"