

VLED-II Series

2nd Generation LED Video Wall

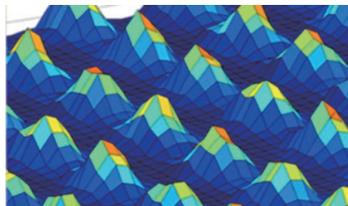


VTRON's VLED-II series adopts the 2nd generation LED that LED chips are directly encapsulated on the PCB (Printed Circuit Board) with COB (Chip On Board) technology. Together with VTRON's unique matte layer, VLED-II offers unrivaled comfortable viewing experience and the highest reliability. VLED-II series uplifts the standard of narrow pixel pitch indoor LED video walls for the applications of control rooms, broadcast studios, conference rooms and auditoriums.

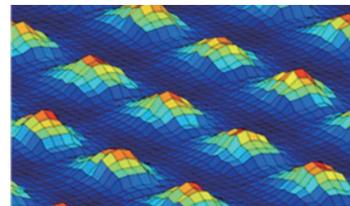
Unrivaled comfortable viewing experience

The 2nd generation LED in a VLED-II module are arranged in high filling rate optical design to form a surface of light source and hence a more uniform image without glares. VTRON's unique matte coating increases image contrast to optimal level, delivers softer images, reduces light radiation, moiré and glare, yet it displays vibrant colour and image details in unprecedented clarity. It minimizes eye strain as a result of long time viewing in short distances.

The distribution of pixel luminescence



Conventional LED light concentrate at tiptop causing eye discomfort



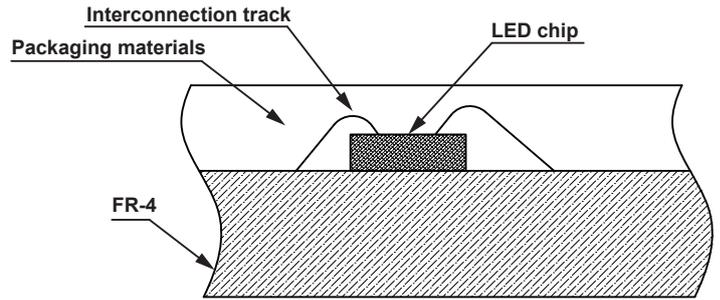
2nd generation LED light is flat offering visual comfort

Truly seamless canvas

Thanks to high filling rate optical design, each VLED-II cabinet is composed of high density of LED lights. VLED-II offers perfect cabinet-to-cabinet alignment, each cabinet can be tiled together snugly to form a seamless imagery. VLED-II video wall is able to deliver high definition image with fine details without pixel loss nor black seam even in a short viewing distance.

Most ever reliable

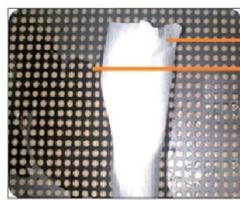
- Lowest dead pixel rate.** Unlike a conventional LED adopting surface mounted devices, 2nd generation of VLED-II has no stent that eliminates the process of electroplating, reflow soldering, mounting, and hence greatly improves the stability of LED performance. Also, VTRON's VLED-II has enhanced circuit, optical and thermal design, the dead pixel rate found in a VLED-II display unit is much lower than that in a conventional LED display.



- Hassle free with three anti properties.** Exceeding the limits of conventional LED panel technology, the VLED-II has smooth panel surface without gaps. VLED-II is wear-resistant, anti-collision, easy to clean, water resistant, dustproof, anti-static providing ingress protection up to IP5X.



Conventional LED
Water trapped in LED gaps causing dead pixels easily



VLED-II
Water resistant, dry the surface with cloth

Cloth
Water



Conventional LED
Dust filled in the LED gaps and cannot be removed easily



VLED-II
Dust off effortlessly with a cloth

Cloth
Dust

- Long life, low total cost of ownership.** The VLED-II offers the best performance lifetime ever in VLED series. In a VLED-II display unit, the heat is dissipated directly through PCB easily. VLED-II adopts larger LED chip size which delivers higher brightness with even heat dissipation. Also, VLED-II has almost no light attenuation that greatly prolongs the display lifetime and maintains brightness consistency. VLED-II is energy saving and environmental friendly, it consumes much less power than that of a conventional LED video wall.

Flexible brightness adjustments

VLED-II video wall exclusively offers 3 modes of brightness adjustments including manual, automatic, programmed control. With ultimate image processing technology, VLED-II can deliver high-quality images during/ after brightness adjustments.



Brightness adjustment in different scenarios

Wide viewing angle

VLED-II technology offers 160° horizontal and 160° vertical viewing angles, and hence a very wide display coverage in your space. Despite where the viewer stands, VLED-II video wall gives a clear and consistent image.

Excellent colour consistency

VLED-II achieves NTSC114% ultra-wide colour gamut to achieve excellent colour performance. VLED-II uses world's most advanced point by point brightness adjustment technology to give soft and delicate images while eliminate brightness inconsistencies and mosaic phenomenon.



Conventional LED image without adjustment

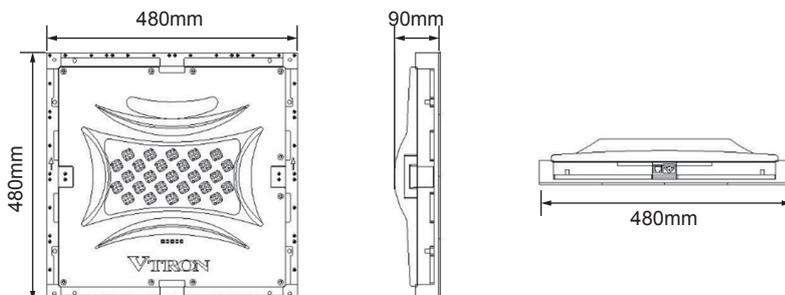


VLED-II image with colour adjustment

Technical Specifications

		VLED - P12II	VLED - P15II	VLED - P18II
Module	LED configuration	COB		
	Pixel pitch (mm)	1.25mm	1.5mm	1.875mm
	Module resolution (W x H)	96 x 96	80 x 80	64 x 64
	Module dimension (mm)	120 x 120mm		
Cabinet	Cabinet module (W x H)	4 x 4		
	Cabinet resolution (W x H)	384 x 384	320 x 320	256 x 256
	Cabinet dimension (W x H x D)	480mm x 480mm x 90mm		
	Weight (kg)	≤7kg		
	Area (m ²)	0.2304		
	Pixel density (pixels/m ²)	640,000	444,444	284,444
	Cabinet flatness (mm)	≤0.1mm		
	Gap (mm)	≤0.2mm		
Display capabilities	Serviceability	Front and back access		
	Brightness (cd/m ²)	≤800		
	Point-by-point brightness/ chroma adjustment	Yes		
	Colour temperature	3,200K - 9,300K adjustable		
	Brightness conformity	≥97%		
	Colour gamut	114% NTSC		
	Horizontal half gain viewing angle	160°		
	Vertical half gain viewing angle	160°		
Processing performance	Gray scale	16 bit/colour		
	Driving mode	Constant current drive		
	Refresh rate (Hz)	≥1920Hz		
	Frame rate (Hz)	60Hz		
Power consumption	Power supply	AC 90-240V 50/60Hz (1+1 redundant power supply for optional)		
	Peak power consumption (W/m ²)	600W/m ²		
	Average power consumption (W/m ²)	200W/m ²		
Operating parameters	Lifetime to half brightness (hrs)	≥100,000hrs		
	Operating temperature (°C)	-10°C - 40°C		
	Operating humidity (RH)	10% - 85%		
	Storage temperature (°C)	-10°C - 60°C		
	Storage humidity (RH)	10% - 85%		
	IP proof level	IP5X		
	Certifications	CCC, CE, CB, RoHS		

Remarks: Specifications are subject to change without prior notice.



VTRON

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