

LED SKIN®

be anything.

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LEDskin®	4
Animation, motion, and good vibes	4
A perfect fit with the beMatrix b62 concept and frames	7
LEDskin® P1.5	10
LEDskin® P2.5	13
Very user friendly	16
Freedom of form	18
Technical specifications	20

Back in 2017, beMatrix was the first to develop a method to **integrate a LED wall into an existing modular frame system** with LEDskin®. A combination of both structure and graphics, LEDskin® is the perfect way to add dynamic content to any exhibit, event, or live experience.

beMatrix LEDskin® was presented with several prestigious awards, reaffirming the innovative nature of this LED solution.



LEDskin®

PATENTED DESIGN

Animation, motion and good vibes

LEDskin® transforms your beMatrix builds into a **hotspot**, full of animation and motion, so your builds become a captivating visual **experience**. With LEDskin®, beMatrix continues to revolutionize the exhibit building experience. In just the blink of an eye, you can combine LED panels and frames to create an impressive video wall. LEDskin® is built within our 62 mm matrix, allowing it to seamlessly **integrate** into your new or existing beMatrix stock. No more visually-disruptive, individual screens with limited and fixed dimensions. Instead, you can turn the whole structure into a totally seamless video wall.



Discover the impact of LEDskin® on the beMatrix [YouTube channel](#).



© Adapt (SE)



© MagnumLive (FI)



A perfect fit with the beMatrix b62 concept and frames

Instead of using textile, wood, or plastic infills to finish your build, why not opt for a beMatrix LEDskin® video wall? It's fast, easy, and entirely seamless.

Modularity



Whether it's a single panel or an entire wall, LEDskin® **fits perfectly with the beMatrix b62-concept**. Both our frames and LEDskin® have a thickness of 62 mm. This allows for a seamless assembly and a perfect finish.

Attachment system

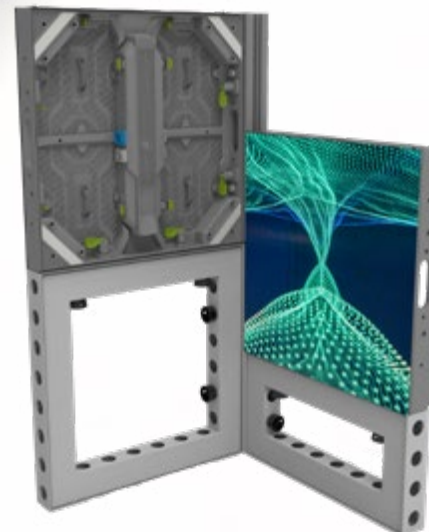
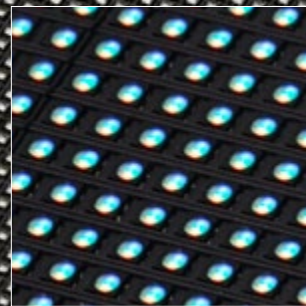


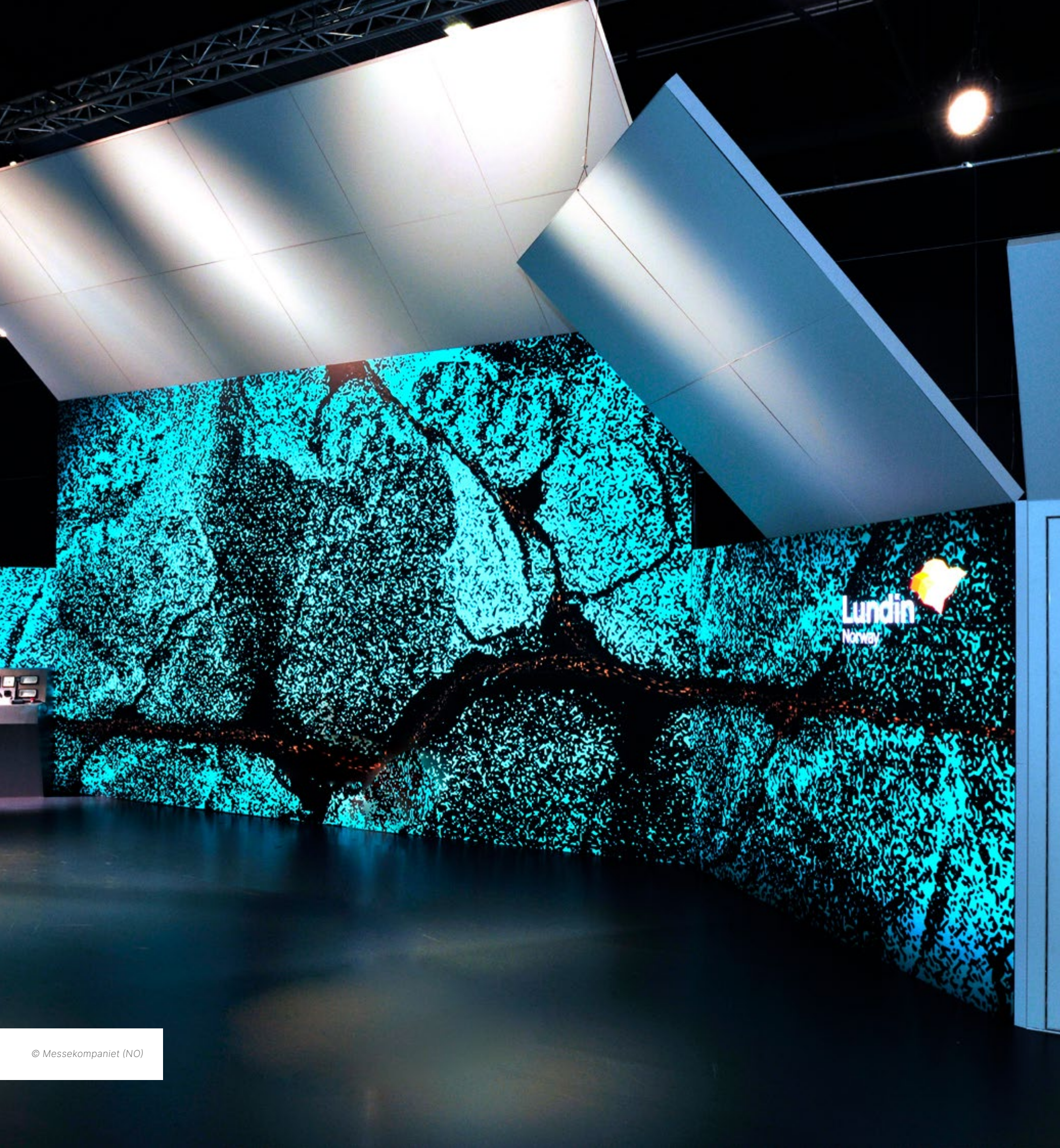
LEDskin® panels are attached to beMatrix aluminum frames with our **standard toolless M8 connectors**. This allows for a fast, firm, and secure connection.

Pixel talk

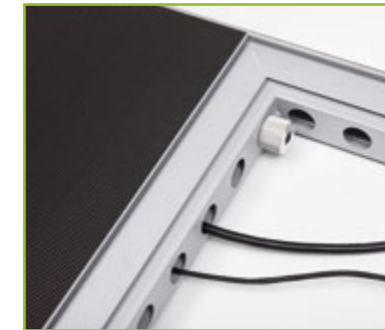


LEDskin® frames are available in 2 pixel pitches: **1.5 and 2.5 mm**. Each pixel pitch has their own specific LED-mounting techniques. This guarantees optimal resolution, brightness, and responsiveness.

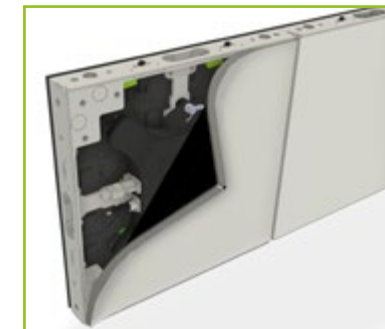




Panels are connected to each other using a precise **pin lock system** while manual connectors ensure a strong bond to the frames.



The holes in the beMatrix frame also serve as a way to route cables, allowing for easy cable-management without an unsightly mess of cables sticking out the back of your builds.



The back of LEDskin® frames can easily be finished using textiles or panels (**patented design**), which can be easily attached using silicon edges or hook and loop tape.



The sides of the LEDskin® can be finished with the existing cover profiles by using cover clips.



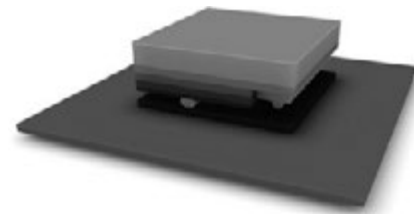
LEDskin® tiles can be **easily removed** and replaced through hotswapping tiles using our Gekko tool. The tiles and power supply units can be removed from both the front and back.

LEDskin® P1.5

beMatrix and Unilumin have created a high quality LEDskin® panel. The LED modules are available in a 1.5 mm pixel pitch with **COB Flip Chip** LED technology. Built with the b62 architecture in mind, our P1.5 LEDskin® can easily integrate into your existing beMatrix inventory. This is a huge game-changer as this is the first-of-its-kind LED cabinet that is available for rental.

Chip on Board technology

COB (Chip on Board) technology is new to the rental market. This technique involves **mounting individual RGB LED chips to a thermally efficient substrate**. This assembly is attached below a uniform, protective layerstack that enhances contrast and provides physical protection. This results in a durable and high-quality LED display, reinforcing our commitment to providing a hassle-free setup.



A full-on sustainable solution

The LED panels, and the content shown on them, can be used multiple of times. The same cannot be said about most printed products, which have a limited lifespan. This reduces resource consumption.

Thanks to our network of **AV bePartners**, you can also save money on transportation and investment costs. Our bePartners offer a variety of rental options and years of experience. They can help you with perfectly integrating our LEDskin® into your beMatrix designs.

Core specifications

- Powered by Unilumin
- Original beMatrix b62 frame compliant
- State of the art COB (FC) technology: robust panel
- 320 × 320 HxV pixels highest resolution
- Cool and power efficient design
- Brightness 1,000 Nits, contrast ≥ 10,000/1
- Size 496 × 496 × 62 mm
- Extremely lightweight 6.1 kg cabinet
- Fast and easy installation
- This new technology and LED panel is **patented**.



Unilumin



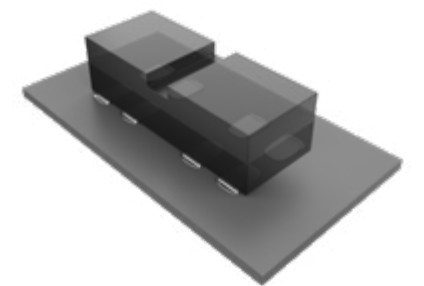


LEDskin® P2.5

A new generation of LEDskin® was launched in 2024 with a new design, improved display specifications, and more integration options. This LED panel, powered by Infiled, has a pixel pitch of 2.5 mm to provide high-quality imagery. In addition, we improved the **strength and durability** of the individual LEDs using **IMD 2 in 1** LED technology.

Integrated Matrix Device LED technology

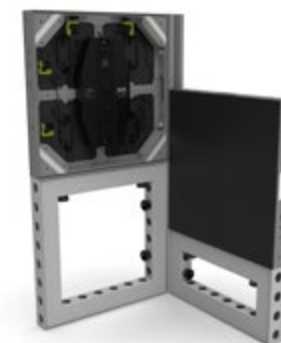
This new LED cabinet uses IMD (Integrated Matrix Device) 2 in 1 technology. **Two groups of RGB diodes are assembled into a single unit** called an IMD. This new generation of LED technology that meets the current market demand for both image quality and durability.



Tech talk

This new LEDskin® P2.5 panel gives you improved reliability thanks to its **anti-collision design**. Additionally, the implementation of IMD 2 in 1 LED technology provides improved color accuracy and consistent brightness over a wide viewing angle. The combination of these features give you a stunning display for your beMatrix builds.

Thanks to our network of **AV bePartners**, you can also save money on transportation and investment costs. Our bePartners offer a variety of rental options and years of experience. They can help you with perfectly integrating our LEDskin® into your beMatrix designs.



INFILED
Screen your dreams

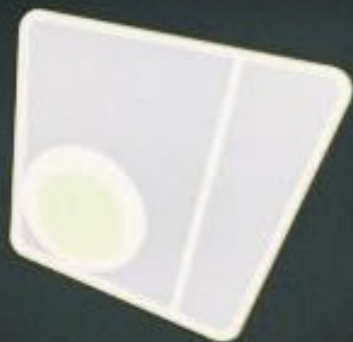
Core specifications

- Powered by Infiled
- Original beMatrix b62 frame compliant
- IMD 2.5 MT2 technology: high color consistency
- 192 × 192 HxV pixels high resolution
- Brightness 1,200 Nits, contrast ≥ 5,000/1
- Size 496 × 496 × 62 mm
- Lightweight 7.5 kg cabinet
- Fast and easy installation
- This new technology and LED panel is **patented**.

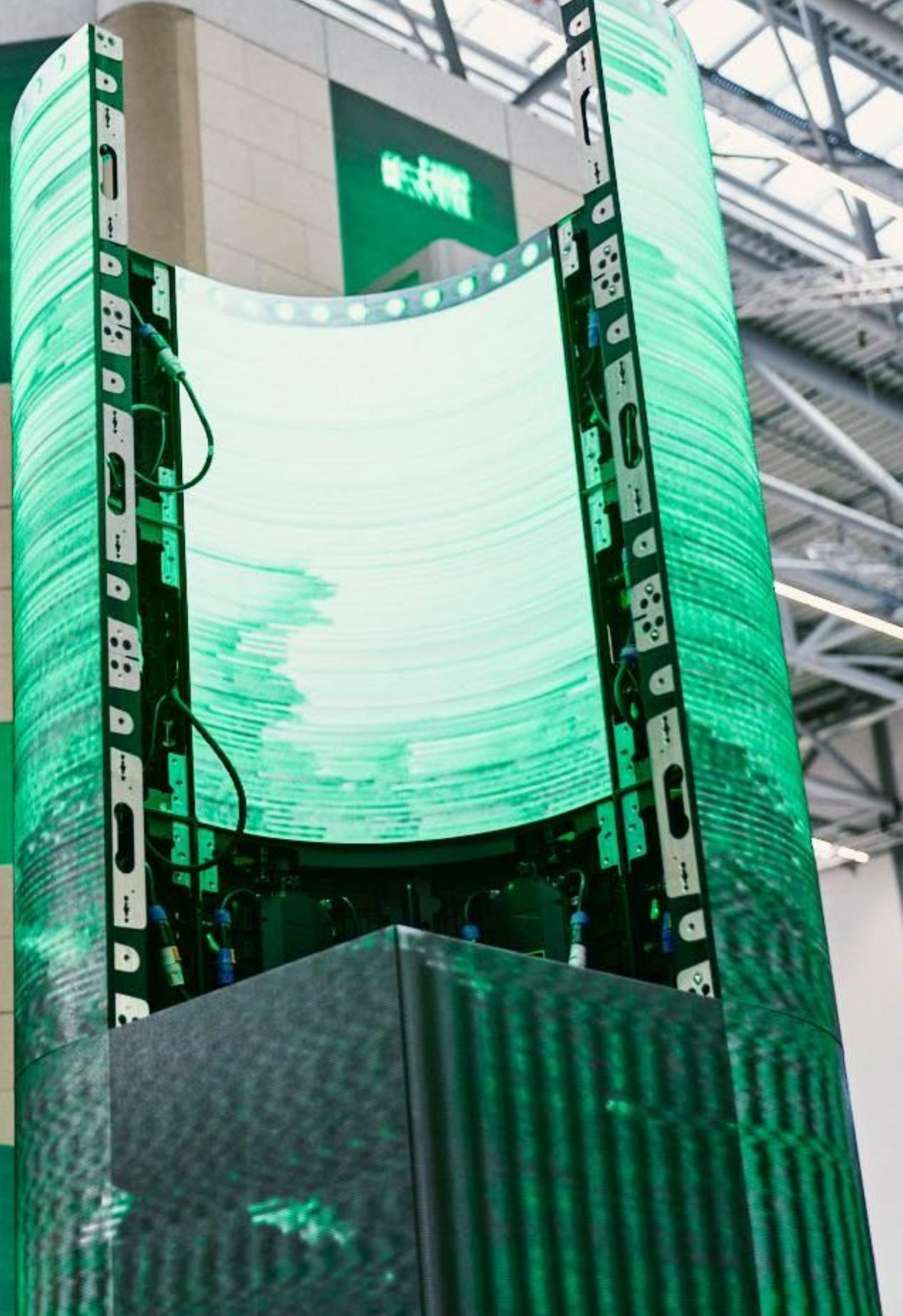
beMatrix

do you take the red or blue pill?

1993



beMatrix



Very user friendly

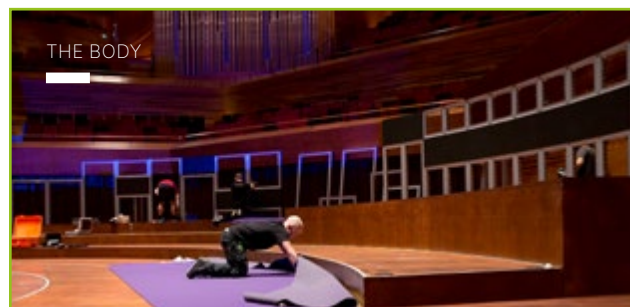
You don't need to be a tech genius to use LEDskin®. Our LED wall is plug & play: **all you need is to mount the tiles, plug it in, and connect to your video device/computer.**

To manage the LEDskin®, we use the well-known and globally-available **Novastar Eco system**. This device is simple and compatible with both Apple OS and Microsoft Windows. Just boot up your device and you can have content on your LEDskin® in only a few seconds.

We are constantly innovating, and we always have the latest Novastar software updates for our products available for you. beMatrix is your one-stop-shop: new innovations, technical training, and support all straight from the source.



© More Than Event (DK)



For optimal handling, we designed all LED panels to be light as possible. Grips and handles are integrated directly into the panels.



We've designed a new flightcase that allows for quick loading and safe handling of our LEDskin® panels. Thanks to **padding within the case**, LEDs do not make direct contact with the sides of the flightcase. This flightcase fits 8 LEDskin® tiles (2 m²) and all necessary cables.

Freedom of form

The creative ways in which you can use LEDskin® are limitless. Think outside of conventional rectangular LED screens. LEDskin® allows you to create more dynamic shapes and mosaics. Thanks to LEDskin®, **you don't need to shy away from corners or curves**: you can create the perfect inner or outer corner as well as curved shapes. LEDskin® opens you up to unlimited design freedom.

Inner and outer corners

By combining LEDskin® frames with beMatrix corner profiles, designers can easily create inner corners. To create outer corners, beMatrix created a molded frame in which 1.5 and 2.5 pixel pitch LED modules can be attached.

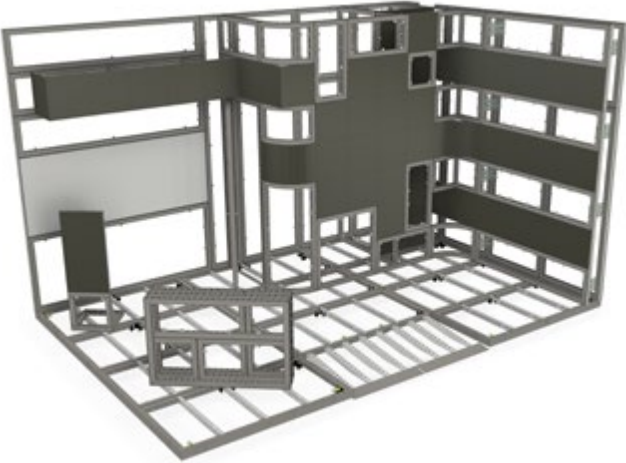
Curves

Curved LED modules can be paired with convex or concave LEDskin® frames allowing you to integrate curves perfectly into the beMatrix frame system. These are available in a 2.5 pixel pitch.

INNER CORNER	OUTER CORNER
	
CONCAVE	CONVEX
	

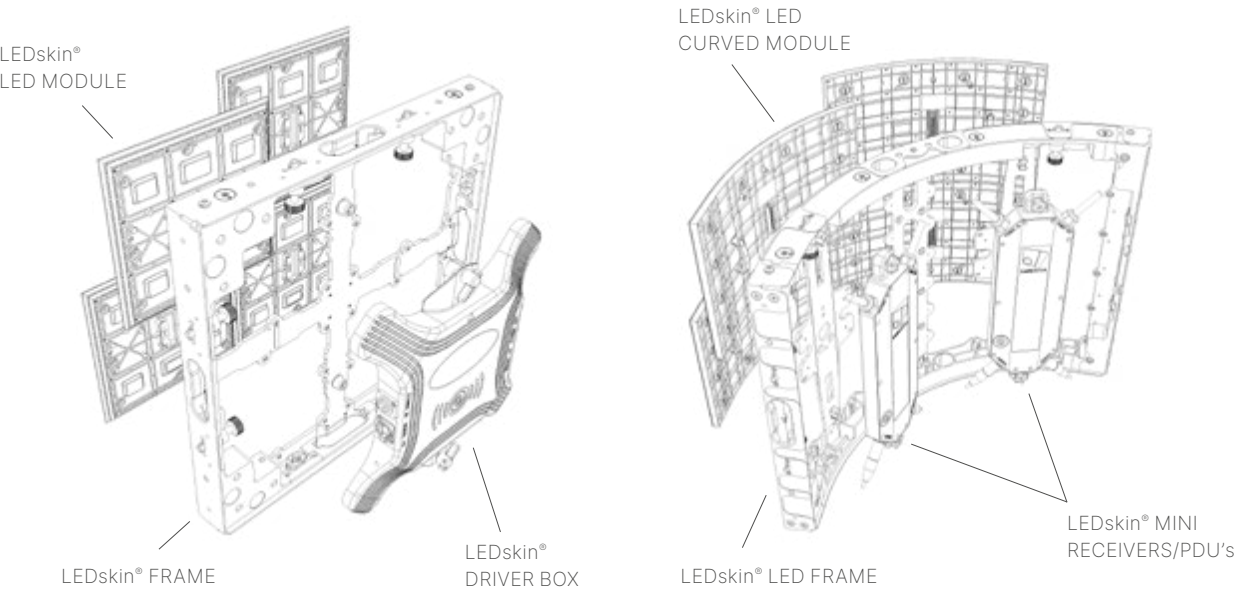


THE BODY





Technical specifications



LEDskin® information

PIXEL PITCHES	1.5 MM COB	2.5 MM IMD 2IN1
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Straight LED frames

Number of LEDskin® modules per cabinet	4 pcs	4 pcs
LEDskin® module resolution	180 × 180 pixels	96 × 96 pixels
LEDskin® module dimensions	248 × 248 mm	248 × 248 mm
LEDskin® cabinet resolution	320 × 320 pixels	192 × 192 pixels
LEDskin® cabinet dimensions	496 × 496 × 62 mm	496 × 496 × 62 mm
Pixel density	416,233 pixels/m²	149,844 pixels/m²
Cabinet weight	6.1 kg	7.5 kg

Curved LED frames - concave - R430

Number of LEDskin® modules per cabinet	-	4 pcs (2 left – 2 right)
LEDskin® module resolution	-	138 × 96 pixels
LEDskin® module dimensions	-	356 × 248 mm
LEDskin® cabinet resolution	-	276 × 192 pixels
LEDskin® cabinet dimensions	-	496 × 496 × 496 mm
Pixel density	-	149,844 pixels/m²

Curved LED frames - convex - R430

Number of LEDskin® modules per cabinet	-	4 pcs (2 left – 2 right)
LEDskin® module resolution	-	156 × 96 pixels
LEDskin® module dimensions	-	402.6 × 248 mm
LEDskin® cabinet resolution	-	312 × 192 pixels
LEDskin® cabinet dimensions	-	496 × 496 × 496 mm
Pixel density	-	149,844 pixels/m²

Mechanical and optical ratings

Surface flatness	Gap ≤ 0.12 mm	Gap ≤ 0.20 mm
Brightness	1,000 nits	1,200 nits
View angle	170°/170°	170°/170°
Optimal viewing distance	≥ 1.5 m	≥ 2.5 m
Brightness adjustment	0-100% 100 steps	0-100% 100 steps
Contrast ratio	≥ 1:10,000	≥ 1:5,000
LED technology	COB FC	IMD 2 in 1
Color technology	EBL+	CBSF
Refresh rate (Hz)	3,840	3,840
Mask	No	Yes
LED Push off force		4.3kg AVG

Power supply

Max. power consumption / cabinet	140 W	144 W
Average power consumption / cabinet	25 W	30 W
Platform	Novastar	Novastar
Receiver card	A10s-Pro	A8s-N
Operating life	100,000 hours	100,000 hours



be strong <> be stylish
be anything.

Come say hi

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