



case study

Digital Signage solution for UAX:

Overcoming Structural and Environmental Challenges with Cutting-Edge LED Technology



Client:

Alfonso X el Sabio University (UAX)

Integrator:

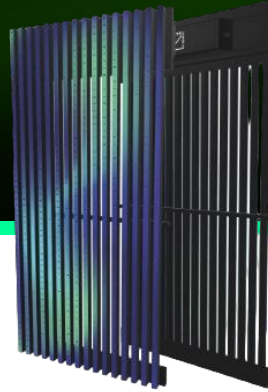
Sevimagen (Elsamex Group)

375LED Solution:

8x3m LED Screen, OUT Transparent High-Brightness model with Eco-active treatment.

Executive Summary:

Alfonso X el Sabio University (UAX) aimed to modernize its main outdoor communication totem by replacing a static banner with a large-format LED screen. The project, led by the integrator Sevimagen, faced a critical obstacle: the existing support structure was not designed for the weight of a conventional screen. 375LED was consulted to engineer a solution that not only addressed this fundamental limitation but also ensured exceptional visual performance and added value in sustainability.



OUT Transparent pp15

Brightness 13,000 nits
Viewing Angle 120°V – 120°H
Refresh Rate 3,840 Hz

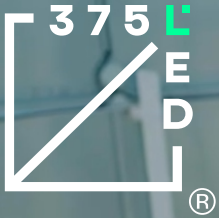
A Structural Challenge

The starting point was a unique metal structure located at the campus entrance. It consisted of a single central pillar supporting, at a height of 7 meters, three large 8x3 meter frames. The goal was to digitize one of these spaces. The initial analysis was clear: the maximum load the structure could support made the installation of a standard LED screen unfeasible. The project required an engineering solution that could adapt to the existing conditions, avoiding costly and complex structural reinforcement work.

Challenge Analysis and Resolution by 375LED

Our approach focused on addressing the project's three main challenges: weight, visual performance, and sustainability.





challenges

1 The Critical Structural Load.

Weight was the decisive factor. A conventional approach would have either dismissed the project or required a significant additional investment in civil works.

Solution: Instead of modifying the structure, we adapted the technology to the limitation. We prescribed our **OUT Transparent** model, a solution from 375LED's lightweight product range. Its low weight per square meter easily met the load requirements, making the project viable while optimizing costs and execution timelines.

2 Outdoor Visual Performance.

An outdoor screen must guarantee perfect legibility under any circumstances. The transparent nature of the panel added a further challenge in maintaining contrast.

Solution: A dual strategy was implemented. First, a **high-brightness DIP configuration (13,000 nits)** was chosen to ensure the content had maximum visual impact, even in direct sunlight. Second, to counteract the contrast loss inherent in transparent panels, a **dark treatment was applied to the rear**. This lightweight and effective measure enhances the depth of blacks and color saturation without compromising the structural advantage of the weight.

3 Sustainability and Added Value.

In a university environment committed to innovation and the environment, a technological installation must go beyond its primary function.

Solution: The screen was treated with our **Eco-active technology**. This photocatalytic coating uses light to actively neutralize atmospheric pollutants such as NOx and SOx. As a result, the screen not only communicates but also helps improve the campus air quality. The installed 24 sqm surface has a **purifying effect equivalent to planting 36 trees**, transforming advertising infrastructure into an environmental asset.



Result: A Benchmark Project

The collaboration between Sevimagen and 375LED turned a critical limitation into an opportunity for innovation. UAX now has a powerful and modern communication channel that:

Is structurally efficient: Installed on the original infrastructure without needing reinforcements.

Offers maximum visual impact: Ensures clear and attractive communication in any lighting condition.

Reflects the institution's values: Projects an image of modernity and demonstrates an active commitment to sustainability.

This project exemplifies the 375LED philosophy: to analyze each client's challenges to provide precise, efficient, and forward-thinking engineering solutions.

