

PRESS RELEASE

The right light for a world fair

Tridonic equipped Expo with innovative LED technology

Dornbirn, September 13, 2022. Tridonic put the Expo fair Dubai Expo in the right light – in impressive ways. The company supplied LED drivers for the three entry portals featuring surreal art. And Tridonic’s energy-efficient DALI LED drivers helped provide optimum, sustainable, resource-saving lighting in the Expo restaurants.

Having been postponed owing to the COVID-19 pandemic, Expo 2020 took place in Dubai in the United Arab Emirates from October 1, 2021 to March 31, 2022. Visitors gained their first impressions of the unique architecture in the exhibition grounds as they approached one of the three entry portals. Inspired by traditional Arabian “mashrabiya” architectural elements, the entrances were sparkling examples of surreal architecture. The portals were remarkable, both visually and technically, consisting of a framework of lines held together by complex structures. This created a geometric grid pattern that shifted according to the viewing angle and allowed air and light to flow freely. High-quality, paper-thin carbon fibres and resin were spun into strands in a special process.

Transcendental interplay of light, shadow and space

To create the desired effect at the entry portals, a transcendental interplay of light, shadow and space was needed. The architect Asif Khan wanted to welcome visitors to the fair with special symbolism. When visitors walked through the gates they passed from the world of the present to the world of the exhibition as it opened up before them, revealing the future with its endless possibilities.

This effect called for unique lighting to illuminate the 21-meter-high, 30-meter-long and 10.5-meter-wide Expo 2020 entry portals. VICE – a long-time Tridonic customer – customized their Lightway 6 IP67 luminaire to bring to life the surreal effect consultant AECOM’s lighting design called for in collaboration with Scientechnic, who did the installation, testing, and commissioning. A special

combination of optics achieved the desired lighting effect of a discrete ground installation and, at the same time, fulfilled the strict lighting regulations. Three lenses with different beam angles of 5, 8, and 16 degrees were integrated and adapted.

LED drivers from Tridonic for high quality of light and colour consistency

VICE designed the Lightway 6 IP67 recessed floor luminaire to provide vertical, horizontal and ambient lighting without dazzling pedestrians. It varies in colour from warm white during the day to intense amber at sunset, recreating the warmth of Dubai's natural light. This stunning effect was the result of a comprehensive series of tests conducted with Scientecnic and the use of Tunable White DT8 LCA PRE DALI LED drivers from Tridonic. These drivers are pre-calibrated to ensure high quality of light and colour consistency. A total of 900 Lightway 6 luminaires were equipped with Tridonic drivers.

"Tridonic has been a reliable partner. The Tunable White DALI Type 8 PRE LED driver catered to a dynamic white transition between 3000 Kelvin to Amber while maintaining the same light intensity," Jessica Farah, Technico-Commercial Manager of Vice, said.

"When we look back at EXPO 2020, I am confident that the entry portals will be on the top of everyone's mind. Its sheer grandeur and engineering marvel have won it many accolades, and it is an honor to have worked on the lighting requirements for these structures. The complexity would not have been possible without the help of partners AECOM, Tridonic, and Vice," Samer Moukalled, Vice President, Scientecnic Lighting Solutions, stated.

Sustainable lighting for Eat at EXPO restaurants

Tridonic equipped not only the entry portals but also other areas of Expo 2020 with innovative LED technology including "Eat at Expo", the name given to around 200 restaurants, food trucks and food stands throughout the exhibition area. Sustainability played a special role at all these facilities because Expo 2020 was committed to concepts that were eco-friendly and saved on resources. The impact will be extended beyond the location and the six-month duration of the event. The strategy was also intended to inspire visitors to become part of the journey towards a more sustainable future.

Eat at Expo was in line with this commitment to sustainability – especially since most restaurants would remain in operation after Expo 2020. This also influenced the lighting concept. “No Grey Area”, a key Tridonic customer, had to ensure that the lighting design and materials for the restaurants met the high sustainability demands of Expo 2020. The products used had to be of the highest quality, operate extremely reliably and be backed by excellent after-sales service.

Dimmable luminaires save energy

The most important requirement for the Eat at Expo restaurants was that the luminaires should be dimmable. This meant they could create a welcoming atmosphere and also save on energy, and is also why the luminaires in the restaurants featured high-quality LCA premium DALI LED drivers from Tridonic. As a result, the lighting concept for Eat at Expo was able to easily meet the high sustainability standards of Expo 2020.

Pictures

Expo Portal

The entry portals of the Expo in Dubai are a jewel of surreal architecture. Modern driver technology from Tridonic enables lighting that supports a transcendental play with light, shadow and space.

Expo Restaurants

"Eat at Expo" represents around 200 restaurants and food outlets around the Expo site in Dubai. The luminaires in all the venues are equipped with premium DALI LED drivers from Tridonic and help to meet the Expo's high sustainability standards.

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About Tridonic

Tridonic is a world-leading supplier of lighting technology, supporting its customers with intelligent hardware and software and offering the highest level of quality, reliability and energy savings. As a global driver of innovation in the field of lighting-based network technology, Tridonic develops scalable, future-oriented solutions that enable new business models for lighting manufacturers, building managers, systems integrators, planners and many other types of customer.

To promote the vision of the “Internet of Light”, Tridonic relies on partnerships with other specialists. The goal is the joint development of innovative technological solutions that convert lighting systems into intelligent networks and thereby enable associated services. Tridonic’s in-depth industry expertise makes it an ideal driver for partnerships with other visionaries.

Tridonic is the technology company of the Zumtobel Group and is headquartered in Dornbirn, Austria. In the 2021/22 fiscal year, Tridonic achieved sales of 363 million euros. 1,869 highly skilled employees and a worldwide sales presence in over 70 countries provide the basis for developing and launching new, smart and connected lighting systems.

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