



HOSPITAL SANT JOAN DESPÍ MOISÈS BROGGI – INTENSIVE CARE UNIT

BARCELONA, SPAIN





Intensive Care Unit

Expansion of the Hospital Sant Joan Despí Moisès Broggi to include another intensive care unit

THE BUILDING

The Hospital Sant Joan Despí Moisès Broggi has opened a new building to respond to new cases of Covid-19. The building complex can also be used to accommodate other intensive care patients. The innovative and sustainable design begins with the ground floor, which has a CAT scanner that will help diagnose patients with Covid-19. It also has an immediate care box, a treatment room and a laboratory that will reduce the time it takes to obtain results and increase the centre's diagnostic capacity, now focused on the detection of new cases of COVID-19.

The first and second floors of the building each have an intensive care unit (ICU) bed space for critical, semi-critical and in-patient COVID-19 patients. A third floor of the building will be realised, which will be the last phase of the project.

THE INSTALLATION & REQUIREMENTS

The design and lighting were the responsibility of the company JDos Screens, which stands out for its innovation, always thinking of the space as a hospital of the future.

The first and second floors of the new building are the most important areas of the project, which are 100% dedicated to the ICUs. They have two large side rooms, where 12 beds are located, and 4 independent boxes. Each ward can hold up to 30 patients, although it is possible to double this number in the event of a critical situation. This last factor makes the hospital the largest ICU in Europe.

To illuminate these two large areas, the company installed 1130 aluminium profiles in conjunction with tunable strips and drivers from Vossloh-Schwabe, as one of the requirements was to implement changes in light colour.

One of the most important objectives for these two floors was to implement a control system that could parameterise the lighting by sector. Two very important points were to be taken into account: patient comfort on the one hand, and the use and functionality required by the healthcare staff on the other.

WHY BLU2LIGHT ASCONTROL SYSTEM IN THE INTENSIVE CARE UNIT

The healthcare team should be able to interact with the control system in a simple and intuitive way. This was achieved by using the LiNA Touch app, as staff can easily control the lighting in the rooms with an iPad, e.g. by increasing the light intensity in an emergency.

The available settings are defined beforehand in the configuration, so that nothing stands in the way of easy operation.

Another point is that the system had to have an excellent cost-benefit ratio, providing the functionality that the engineers required, being a highly efficient system, which Blu2Light fulfils perfectly. Last but not least, the implementation on site and the configuration of the system had to be easy to carry out, trying to reduce the wiring between components as much as possible.



Light colour 2700K at dusk and dawn



Light colour 6500K at midday



STAND-OUT FEATURES OF THE INSTALLATION

- ⇒ Easy control by using an iPAD
- Automatic sequence of the light colours adapted to the times of day for better well-being
- Sustainable and energy-saving LEDs
- ⇒ Highly efficient system

THE PRODUCTS

For presence and brightness, 12 XS MultiSensors are used per floor, which are easily and securely connected to a mesh network via Bluetooth using the Blu2Light LiNA Connect app. This way, no valuable time needs to be invested in additional wiring to connect the system components.

The lighting above the beds is adjustable and controlled by an automatic sequence in the Blu2Light system. During the day, the lighting in this area is adjusted to the outdoor light: The light colour changes from 2700K at dusk and dawn to 6500K at midday. This sequence is programmed to provide the greatest possible comfort for the hospital's patients.

The luminaires in the centre of the room are equipped with DALI and are primarily intended for healthcare staff. The illuminance can be increased as needed without compromising patient comfort.

PRODUCTS USED IN THIS PROJECT

- B2L Multisensor XS Ref. 186706
- B2L Extender 64 Ref. 186667
- Classic DALI Light Controller Ref 186220
- LED Line SMD W2 Comfort Ref. 569561
- PrimeLine NFC L-TW DALI Ref. 187048/187049







Light designer JDos Screens



