

PHILIPS

dynalite

Lighting Control

Giza, Egypt

Illuminating ancient wonders
with modern lighting control

Grand Egyptian Museum

About the project

The Grand Egyptian Museum (GEM) is the largest archaeological museum in the world, spanning 480,000 m² and housing over 100,000 ancient artifacts including the complete Tutankhamun collection.

Located within walking distance from the Pyramids of Giza, GEM is a central part of the Egyptian government's new master plan for the Giza Plateau. It is expected to welcome more than 5 million visitors per year, breathing new life into Egypt's tourism economy.

“When showcasing such precious artefacts, why would you settle for anything other than the best lighting? Just like the location and architecture were all thoughtfully considered to create the ultimate experience, so too was the lighting control.”

Customer name
Company

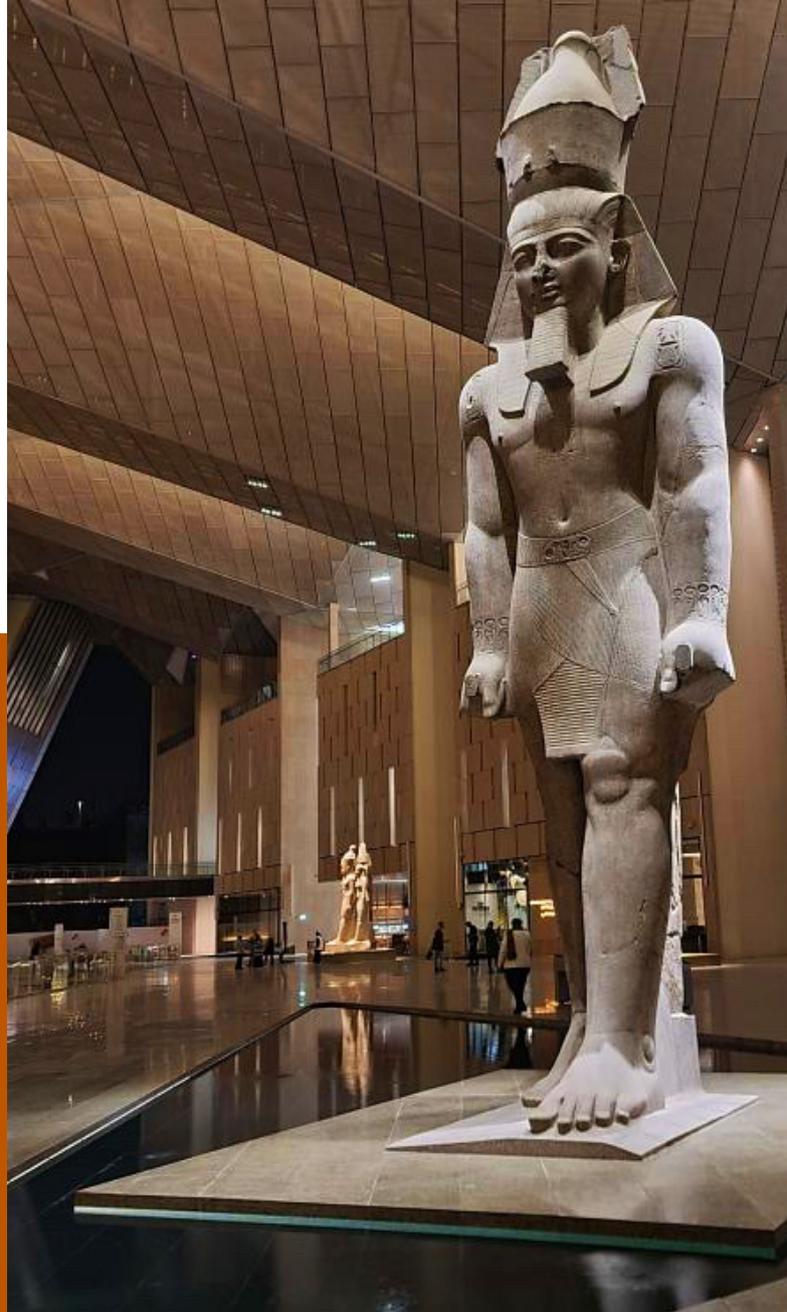
The challenge

To showcase Egypt's most precious ancient artefacts in the best possible light, a flexible and scalable connected lighting control system was required.

In addition to its main exhibits, foyers, amenity areas, and hallways, the museum has many smaller multi-use rooms and galleries. The lighting control in these areas must be dynamically adaptable to each room's changing requirements.

While some areas within the museum, such as the main entrance, are flooded with natural light, others have strict climate control measures in place including limits on permitted light levels. Therefore, a bespoke collection of lighting scenes was required to ensure the comfort of guests whilst preserving the integrity of the exhibits.

Lastly, a solution that could easily and reliably integrate with the building management system was preferred to streamline the day-to-day operations of facility managers.



“Only the Dynalite System can provide such high-quality scene control at this scale. It was the natural choice.”

CSI name
Position, Modernlite

Benefits

The Dynalite System is:



Scalable



Reliable



Sustainable



Human-centric

The solution

Philips Dynalite was the solution of choice to monitor and control GEM's 30,000+ lighting fixtures. In total, 10,000 Dynalite devices were installed, including an array of sensors, user interfaces, certified DALI-2 controllers, and Philips Dynalite's dedicated head-end software, System Manager.

Sleek and scalable

Philips Dynalite's enhanced DALI capabilities provided GEM with the power and flexibility required to run a museum of this size.

The digitally addressable lighting groups can be reconfigured as the venue's needs change. A storage area today can easily become a temporary gallery or interactive learning space tomorrow, without rewiring any lights or control circuits.

Furthermore, mapping the DALI addresses to the much larger DyNet address pool provides full control at unprecedented scale and outstanding network speeds, resulting in a lighting control system fit for a Pharaoh!

Where luxury and ambience meet functionality

To meet GEM's unique lighting requirements, a series of bespoke lighting scenes and schedules were created to balance occupancy comfort with energy requirements and to preserve the longevity of artefacts at the museum.

The sensors and user interfaces located around GEM provide the system with real-time information on how each space is being used. Lights are automatically turned off in unoccupied areas, and artificial light is supplemented with natural light wherever possible.

Scenes and schedules can intelligently adapt to the time of day or year, and can even be altered to cater for special events.

An intuitive platform for monitoring and control

With System Manager, GEM's facility managers now have convenient access to a range of powerful features including:

- **Scene and schedule editing:** Tailor lighting levels or create custom scenes to suit any occasion with just a few mouse clicks.
- **DALI emergency lighting:** Rest assured that the emergency lighting system is fully operational thanks to a range of monitoring and testing features.
- **Proactive maintenance:** Monitor the life expectancy of lamps around the building to ensure that guests are never left in the dark.
- **Third-party integration:** Integrate the Dynalite System with a range of third-party systems including BMS and fire alarms for a seamless user experience.

Conclusion

GEM sets the gold standard for preserving and displaying items of cultural and historical significance. With the understanding that visitors would flock from all over the world to view these ancient artefacts, the project team knew that only the world's finest lighting control solution would suffice.

Thanks to the diligence of our Certified System Integrator, Modernlite, and with support from Signify's project team, GEM's management team know that the integrity of their exhibits and the experience of guests is being upheld around the clock.

The flexibility and scalability of the Dynalite System has set GEM up for long-term success, with the ability to grow and adapt the lighting layout over time. Additionally, a suite of advanced features pack incredible value and streamline day-to-day operations for the facility managers of this world-class museum.

"The lighting control creates beautiful, ambient, and functional spaces. It changes throughout the day to suit guests needs."

Employee Name
Signify

Project team

Customer
Ministry of State for Antiquities, Egypt

General Contractor
BESIX Orascom Joint Venture (BOJV)

Consultant
EHAF

Certified System Integrator
Modernlite

Key account manager
Insert name,
Signify CSI



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