# RDF Chosen to Provide Central Battery Backup System from TM Technologie for Data Centre Emergency Lighting

Image: Energy Efficiency Requirements in Data Centres

Our client, a specialist in providing data centres and mission critical IT facilities worldwide, required a central battery solution for their data centre server halls. For a new UK data centre they had worked with a global lighting manufacturer to identify a lighting solution that would help them achieve BREEAM excellence with the most efficient use of energy whilst also being autonomous in its operation.

Each of the 3 floors of the data centre would have over 300 LED strip luminaires in continuous trunking with local PIR sensors to allow the lights to be dimmed for maximum energy savings. These lights are then used for emergency illumination, supplied by the central battery system on loss of power to the floor or building to allow for safe evacuation of employees or visitors.
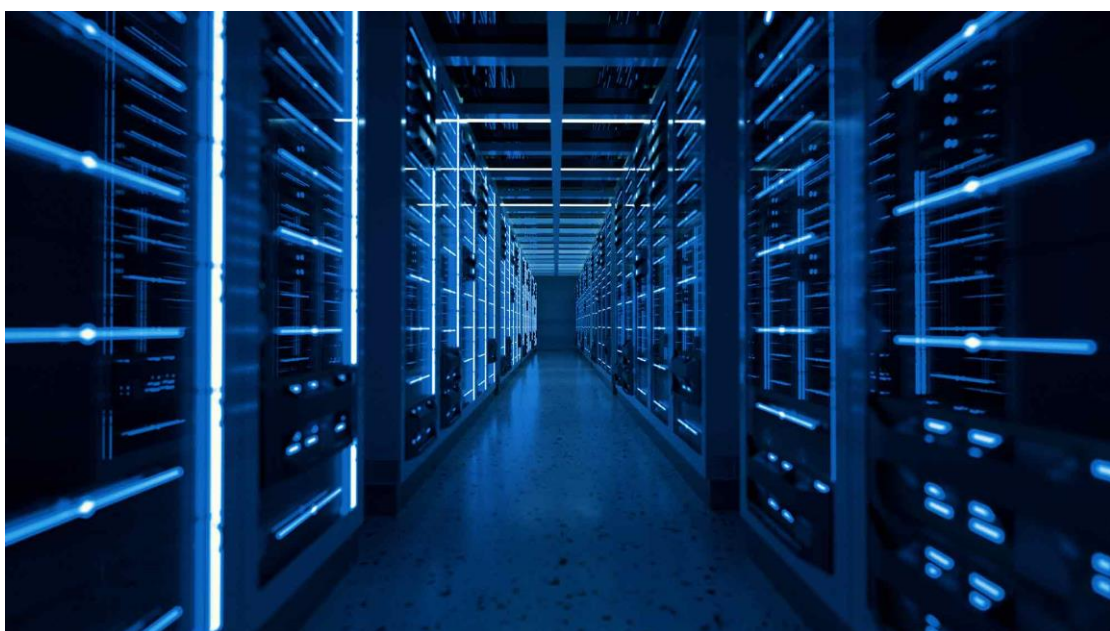
Image: Data Centre Dimming for Efficiency

Since standard self-contained emergency lighting usually requires battery replacement every 4 years the client wanted a lower maintenance and extended life emergency lighting solution since access for lighting maintenance purposes would be limited. We immediately identified the TM-CBA central battery system from TM Technologie as being the best solution for these requirements.

There are a number of benefits to using the TM central battery solution such as that battery life is designed to be a minimum of 10 years and also battery maintenance can be done in a central location without needing access to the sensitive areas of the data centre. In addition, the TM-CBA system is highly efficient in normal conditions since the supply to the lights is diverted from the central battery supply rather than UPS or inverter solutions for which power electronics are always energised.

Images: TM-CBA Central Battery System from TM Technologie

The TM central battery system can be integrated with any building management system (BMS) using Modbus or can be provided with the ELVIS visualisation and monitoring software for installation on a remote PC connected to a LAN. When used with TM emergency luminaires and exit signs or with the use of the TM conversion modules the system can test and monitor every emergency fitting per local maintenance requirements and compile a regular report that can be emailed to the person responsible for the emergency lighting upkeep.

Unlike other automatic emergency reporting systems, the TM-CBA saves on copper use since it requires no additional data cables or wireless transmitters between the luminaires since all communications are handled using the power cables already connected between the CBU and the fittings (data-over-power).

Images: RDF Technical Submission

Our RDF Technical team are now working with the client and have provided all documentation within a Technical Submission document required by all vendors on this project to ensure our solution meets the needs of the project and will integrate with other systems in the building.

We are now planning the pre-installation site meeting with key members of the project team including the electrical contractors to ensure any queries are addressed before the luminaire wiring and installations works begin.

The data centre is expected to be open late 2023.

RDF have a wide range of solutions for emergency lighting systems which are especially suited to standard lighting that operate in either AC or DC mode for centrally powered emergency lighting for combined standard and emergency use.

RDF also have a wide range of TM Technologie emergency lights in stock in the UK and also provide access to their full range of emergency lights, self-contained systems and smart addressable central battery systems for specification projects.

See our website for our full range of products including our static inverters, legacy DC central battery systems and UPS systems.

Follow us on Instagram and LinkedIn for more regular RDF product updates and news.