

CASE STUDY JAMAICA SANGSTER INTERNATIONAL AIRPORT

PROJECT KEY FACTS

Airport: Sangster International Airport

Location: Jamaica

Application: International Airport

Runway: 2 662 m

Solution: Backup Solar Airfield Lighting

Buyer: MBJ Airports Limited

Year of Installation: 2024





S4GA retroreflective markers installed as a backup solution in case of taxiway edge lights failure



OVERVIEW

In 2024, **Sangster International Airport (MBJ)** in Montego Bay - one of the busiest airports in the Caribbean - took an important step to improve the reliability of its runway operations. The airport's operator, part of Grupo Aeroportuario del Pacífico (GAP), decided to install a **solar runway lighting system as a backup** to the existing conventional wired lighting.

The main goal was to ensure smooth and safe operations in case of a power outage or during maintenance. At the same time, the project supported GAP's strong focus on safety and sustainability, helping the airport reduce its dependency on traditional infrastructure while moving toward greener solutions.

CHALLENGE

Working on an active international runway always comes with a few challenges. In this case, the airport's own team handled the installation - and it was their first time working with a solar lighting system. That made the process a bit more demanding, especially under the pressure of keeping operations running.

Despite this, the team did an excellent job. With support from an S4GA technicians, who handled the final setup and commissioning, the system was successfully installed and fully operational in the end.

SOLUTION

Instead of opting for a traditional wired backup or a mobile trailer-based system that require manual setup in emergencies, the airport chose a **fixed solar backup system**. This option made more sense for a busy international airport because:

- It is immediately available
- Reguires minimum maintenance
- · Integrates easily with daily operations.

The system features ICAO-compliant solar runway lights, certified for jet blast resistance, frangibility, and photometric performance. The solution provides a stable, independent backup that doesn't rely on external power or additional infrastructure. It simplifies installation process and significantly decreases operational costs.

By choosing S4GA, Sangster International Airport got a durable, long-term backup solution that supports both safety and sustainability goals, showing how modern airports stay prepared to unpredictable blackouts without compromising efficiency or the environment.



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S4GA PRODUCTS









SOLAR RUNWAY EDGE LIGHT W/W

SOLAR RUNWAY EDGE LIGHT W/Y

SOLAR RUNWAY THRESHOLD END

SOLAR RUNWAY THRESHOLD









SOLAR RUNWAY END LIGHT

UR-101 HANDHELD CONTROLLER

UR-201 CONTROL & MONITORING UNIT

TAXIWAY RETROREFLECTIVE MARKER

APPLICATION PHOTOS









