

CASE STUDY BULGARIA RUSE AIRPORT

PROJECT KEY FACTS

Airport: Ruse Airport

Location: Bulgaria

Application: Regional Airport

Runway Length: 2 500 m

Solution: Permanent Solar Runway Lighting

Products: Solar Runway Edge Lights, Solar Threshold End Lights, UR-101 Handheld Controller in a Protective Case, OCT- 401 Charger, Taxiway Retroreflective Markers

Buyers: Stroyproject, STRAPLAN

Year of Installation: 2023



OVERVIEW

Originally built in 1967 for the Bulgarian Air Force and later used for domestic flights, Ruse Airport is now being transformed into a key regional aviation hub. An important part of this redevelopment is the installation of a new airport ground lighting (AGL) system. The airport has chosen the S4GA Permanent Solar AGL System for this upgrade.

CHALLENGE

The new runway lighting **had to meet strict ICAO standards for Category 4C**, ensuring that Ruse Airport's improved facilities would be internationally compliant and capable of handling increased air traffic volumes.

Additionally, there was an **urgent need to commence night flights** quickly, and the new airport lighting system had to be deployed within a few months from order to commissioning, with solar lighting being the only viable solution.

Furthermore, due to **budget constraints**, airport needed a cost-effective solution without compromising quality. The new runway lighting system also had to be easy for the existing technical team to install and maintain without requiring specialized contractors.

SOLUTION

S4GA offered a Solar Airport Lighting System that perfectly met Ruse Airport's needs:

- **Cost-efficiency:** The S4GA solar AGL system costs 35% less than wired lighting, making it a budget-friendly option for airports.
- **Swift Installation:** The system was designed for quick installation by the airport's staff, meeting the urgent deadline for starting night operations.
- **Sustainability:** The use of solar energy offered an eco-friendly alternative, cutting operational costs and supporting sustainable practices.
- **Reliability and Compliance:** The S4GA runway lighting system meets all ICAO, FAA, EASA, CASA requirements and is certified by accredited laboratories.

"The S4GA Permanent Solar AGL System is really straightforward to install. We didn't need any specialized contractors, so it fit perfectly with our team and saved us money. The maintenance is also simple and doesn't cost much. The solar power means we don't have to do a lot of upkeep, and it keeps running reliably. Overall, it's been a great choice for updating our airport without breaking the bank."

- **m.sc.eng. Nedko Todorov, Project Manager at STRAPLAN**

The successful installation of S4GA Solar Airport Lighting at Ruse Airport demonstrates a new solution for small regional airports with budget restrictions and a shortage of technical staff. It's a sustainable and cost-effective alternative to traditional wired lighting, with lower initial investment and minimal operational costs.



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S4GA PRODUCTS

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SOLAR RUNWAY
EDGE LIGHT W/W

②



SOLAR RUNWAY
THRESHOLD END
LIGHT



UR-101 HANDHELD
CONTROLLER
WITH CASE



TAXIWAY
RETROREFLECTIVE
MARKER



OCT-401
CHARGER

APPLICATION PHOTOS

