

# CASE STUDY COLOMBIA REYES MURILLO AIRPORT

## PROJECT KEY FACTS

**Airport:** Reyes Murillo Airport (NQU)

**Location:** Colombia

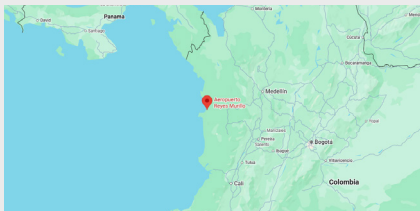
**Application:** Regional Airport

**Runway:** 1 340 m

**Solution:** Permanent Solar Airfield Lighting

**Buyer:** Aeronáutica Civil (Aerocivil)

**Year of Installation:** 2025



## OVERVIEW

Reyes Murillo (Nuquí) Airport serves the **remote coastal town** of Nuquí on Colombia's Pacific coast, a humid tropical environment with limited access and no reliable electrical grid. Operated by Aeronáutica Civil (Aerocivil), the **airport plays a vital role** in regional connectivity, medical transport, and eco-tourism.

Following a major runway expansion completed in 2023, Aerocivil **required a reliable, autonomous runway lighting system** capable of supporting increased traffic without the need for electrical infrastructure. Conventional wired AGL was not feasible due to cost, maintenance complexity, and grid limitations.

## CHALLENGE

**Traditional wired systems did not suit Reyes Murillo Airport's operations** due to the cost of installing electrical infrastructure, the difficulty of maintaining wired equipment in a remote jungle-coastal environment, and a high risk of grid instability and outages. The requirements were:

- Full independence from electrical power
- Immunity to tropical humidity and corrosion
- Minimal civil works
- Safe operations for ATR 42 aircraft

The system had to **fit the economic profile of a remote regional airport**, as well as support increased traffic after the runway expansion.

## SOLUTION

Aerocivil selected a solar runway lighting system that allows **100% grid-independent operation**.

In addition to proven performance in tropical, high-humidity regions, **S4GA Solar Airfield Lighting** offered fast deployment, low maintenance in the long term, and compatibility with increased traffic (including ATR 42, LET 410, Beechcraft 1900D).

Installation, commissioning, and ongoing maintenance support are provided by MC Universal. As the S4GA-certified partner, the team completed professional training at S4GA headquarters in Poland.

By deploying solar runway lighting at Nuquí, **Aerocivil strengthened its role as a responsible national operator supporting regional development through reliable air connectivity**.

The system enables **safe and predictable operations at a remote airport**, ensuring continued access for passenger transport, medical flights, and essential services in a region where conventional infrastructure is limited.



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## S4GA PRODUCTS

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**SOLAR RUNWAY  
EDGE LIGHT W/W**

①



**SOLAR RUNWAY  
EDGE LIGHT W/Y**

③



**SOLAR RUNWAY  
THRESHOLD END  
LIGHT**

④



**SOLAR TURNING  
PAD LIGHT**

④



**SOLAR TAXIWAY  
LIGHT**



**LED PAPI  
POWERED BY  
24 VDC**



**DIGITAL  
INCLINOMETER  
FOR LED PAPI**



**ILLUMINATED  
TAXIWAY  
GUIDANCE SIGNS**



**SOLAR ENGINE  
MAX**



**SOLAR ENGINE  
COMPACT**



**UR-101 HANDHELD  
CONTROLLER**



**UR-201 CONTROL  
& MONITORING  
UNIT**

## APPLICATION PHOTOS

