

# CASE STUDY

## ETHIOPIA

### JIJIGA AIRPORT

#### PROJECT KEY FACTS

**Airport:** Jijiga Airport

**Location:** Ethiopia, Somali Region

**Application:** International airport

**Runway:** 2.400 m x 45 m

**Solution:** Complete Solar LED Airfield Lighting System

**Products:** Solar Runway Lights, Solar Threshold Lights, Solar Runway End Lights, Solar Taxiway Lights, Solar Approach Lights, UR-201 Control & Monitoring Unit, ALCMS Advanced Control & Monitoring System

**Buyer:** Ethiopian Airlines

**Year of Installation:** 2018



#### OVERVIEW

Jijiga Airport (Wilwal International Airport) is serving Jijiga - capital city of Somali Region in Ethiopia. By the 1990s, the airport was used by Ethiopian Air Force and until now the runway has not been illuminated with any airfield lights.

In recent years, the Ethiopian Government has been heavily investing in airports reconstruction including rehabilitation of a runway at Jijiga Airport.

#### CHALLENGE

For most African airports – and Jijiga is not an exception - it's always been a challenge to install systems that require stable power supply - would it be terminal, tower or airfield:

- Electrical power supply is unstable due to unreliable electrical grid
- Installation of a traditional hard-wired electrical system (including AGL) is economically inefficient due to limited budget
- The cost of electricity in Africa is one of the highest in the World.

As a result, A Tender for The Supply, Installation, and Commissioning of **Solar Airfield Lighting System** at Jijiga Wilwal Garad Airport has been issued.

#### SOLUTION

S4GA together with its partner Alpha Airport provided complete Solar LED airfield lighting system which:

- **operates 365 days on solar** energy
- has **5-level protection** against system failure
- designed for **non-precision airports** located in countries with high photovoltaic potential and unreliable electrical supply



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## S4GA PRODUCTS



SOLAR RUNWAY  
EDGE LIGHT



SOLAR  
THRESHOLD  
LIGHT



SOLAR RUNWAY  
END LIGHT



SOLAR TAXIWAY  
LIGHT



SOLAR  
APPROACH LIGHT



UR-201 CONTROL  
& MONITORING  
UNIT



ALCMS  
ADVANCED

## APPLICATION PHOTOS

