

CASE STUDY NORTH AFRICA MILITARY AIRBASE

PROJECT KEY FACTS

Airport: Military Air Base

Location: North Africa

Application: Military airport
located in African desert

Runway: two runways of 3 000 m

Solution: Solar LED Airfield Lighting System

Products: Solar Runway Edge Lights,
Solar Runway Threshold End Lights,
Solar Taxiway Lights, PAPI,
Wind Direction Indicator,
Taxiway Retro Reflective Markers,
Guidance Signs, UR-201 Control &
Monitoring Unit

Year of Installation: 2015



OVERVIEW

In 2015 S4GA has been contacted by local African construction company planning to install airfield lighting at military airbase. Customer considered conventional lighting however has very little experience in area of airfield lighting.

Scope of work was: to illuminate 3.000 m runway and parallel taxiway that was used by air forces as secondary runway.

CHALLENGE

The airport was equipped with old airfield lighting system that was partially vandalized and did not work properly. Airbase power supply was unreliable and based 100% on power generator. The solution was to install new airfield ground lighting.

However, the main issue that made almost impossible to use hard-wired runway lighting was lack of main electrical power supply as airport is located in a desert.

SOLUTION

Alternative solution for this airfield was either using diesel generator or solar airfield lighting.

S4GA offered solar LED airfield lighting system that requires neither electrical power supply nor building a complex power supply network (CCRs, transformers, cables, etc.). In North Africa where photovoltaic potential is one of the highest on the planet, S4GA solar AGL operates 365 days a year on solar energy.

Offered solar system requires minimum maintenance – End Customer is expected to exchange batteries once in 2-3 years – which is equal to less than 1% of AGL system total cost.

Installation and commissioning of a complete runway lighting has lasted less than 4 weeks. In case of traditional wired system, it would take few months at least.



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S4GA PRODUCTS

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**SOLAR RUNWAY
EDGE LIGHT**

②



**SOLAR RUNWAY
THRESHOLD END
LIGHT**

③



**SOLAR TAXIWAY
LIGHT**



PAPI LIGHT



**WIND DIRECTION
INDICATOR**



**TAXIWAY
EDGE RETRO
REFLECTIVE
MARKER**



GUIDANCE SIGN



**UR-201 CONTROL
& MONITORING
UNIT**

APPLICATION PHOTOS

