

Mimic In-House Article

Subject: What's in store for Aviation 2026?

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## What's in store for Aviation 2026?



By 2026, **aviation lighting** is expected to advance rapidly as airports and aircraft adopt to more efficient and increasingly data-driven systems. LED technology will continue to dominate runways, taxiways, approach paths, and apron areas because not only does it offer superior energy efficiency and longevity, it also offers higher visibility in challenging weather. Airports are expanding the use of network-connected LED fixtures. These connected fixtures support remote monitoring and diagnostics. They also enable predictive maintenance to reduce downtime, and have greater reliability during night operations or low-visibility conditions.

Airfields are also moving toward **adaptive lighting** that responds to real-time conditions such as lighting systems that can adjust brightness and beam patterns based on fog, rain, glare, or aircraft movement to enhance safety while conserving energy. The integration of sensors, aircraft-tracking systems, and ground radar allows illumination to be optimised dynamically rather than operating at maximum intensity continuously.

**Solar-powered lighting** is becoming more commonplace, especially at smaller airports and informal private runways. Solar runway edge lights, PAPIs, and taxiway markers equipped with battery storage reduce electrical grid dependency and at the same time, offer durable and flexible solutions suited for harsh environments where infrastructure is limited.

## View our current Aviation offerings here:

https://www.mimiccomponents.co.za/product-catalogues/aviation-lighting/

Until then, Blue skies and tailwinds to all our valued aviation customers!

## JHB Branch

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