

London Gatwick Airport (LGW)



Opened as an aerodrome in the late 1920s, LGW started taking commercial flights in 1933. Now, with over 46,000,000 passengers travelling through it every year, it's the second busiest single-runway in the world.

The challenge

There were two main reasons LGW decided to move from HPS to LED lighting:

- A number of their stands weren't meeting EASA requirements.
- They wanted to reduce their energy use by 20% compared to 1990s levels.

So, they came straight to Midstream Lighting to help them meet these challenges.

‘The change was likened to coming out of the Victorian age into the modern world.’

LES MITCHELL, AIRSIDE PROJECT DELIVERY LEAD - LGW

At a glance

Sector: Aviation
Customer: LGW
Number of passengers: 43,000,000
Runways: 1
Stands: 119
Aircraft movements: 275,000
Project date: 2017
LED floodlights installed: 564
Type: Titan Series
Increase in light levels: 50%
Lux average values: 30 Lux

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Energy savings:

- 256kW vs 430kW
- 40%
- Payback £50,000 pa.

Payback time: 15 years



Our solution

After a complete review of LGW's current lighting facilities, we put our Lighting Design Team on the case. The solution they came up with was to upgrade all sodium apron lighting to our flagship Titan Series – with over 560 LED floodlights being installed. This made LGW the first major European airport to have a fully LED-lit and EASA-compliant apron.

More importantly, the airport is now safer for staff and passengers, it's more secure, and with less downtime runs more smoothly.

	SODIUM	LED
Number of projectors	861	564
Nominal power for single appliance	400 kW	455 kW
Absorbed power (measured data)	500	455
Total power absorbed	430.5	256.62
Energy consumption per year	1,885,590 kWh	1,123,996 kWh
Colour Temperature	2,300K	5,700K
Colour Rendering Index	30	70
Average Light Level	20 Lux	30 Lux
Uniformity	0.2	0.3
Energy Saving	/	40%