

LDOH003 INCAND-AIR 30 LED Downlight Engine



Description

Lumascap's INCAND-AIR 30 is a high power LED based downlight system developed for retrofitting into the mounting hardware of existing high power downlights, or for use as a complete luminaire for new installations.

INCAND-AIR 30 features a specifically developed LED light engine based on an array of 30 x Red, Green, Blue, White and Amber Luxeon LEDs.

The INCAND-AIR 30 is capable of producing beautiful, high CRI whites of any CCT and accurately replicates the colour temperature shift that is characteristic of halogen lamps when dimmed. The use of RGBWA gives the added benefit of an ability to produce not only excellent whites, but rich, vivid colours.

INCAND-AIR 30 achieves outstanding, totally smooth dimming performance from 100% to black. This is accomplished by the use of an Adaptive Resolution Pulse Width Modulation dimming method. This ensures that colours remain consistent and controllable at all levels, which is critical for the accurate control of colour temperature during dimming. All luminaires across the installation dim smoothly to the same level and colour temperature. They dim at the same rate and finally fade to black at the same time, with no flicker or step change to off.

Light output and LED life have been maximised through the employment of a highly effective thermal management system. The junction temperatures of the LEDs are maintained at a level low enough to provide 70% Lumen maintenance after 60,000 hours. The application of effective passive cooling, and the use of heatpipes results in a luminaire that does not generate any fan noise, or fan related maintenance issues.

Should a situation occur where the temperature of the LEDs increases to a point where the usable life of the LEDs is threatened, the AIRLED will take steps to maintain the temperature at a normal operating level, while alerting the monitoring system of the issue through DMX-RDM.

FEATURES

- AIR- Adaptive Resolution provides intimate and accurate control of the light output from the LEDs thus ensuring smooth dimming performance over the entire dimming range.
- Multiple control modes including adaptive resolution dimming of individual colours channels for full control of custom colours and fades.
- Incandescent Mode Replicates the colour temperature shift that is characteristic of Halogen lamps when dimmed.
- Temperature and fault monitoring feedback.
- Local thermal fold-back.
- Effective, considered thermal management for LED longevity and reliability.
- Resistant to power fluctuations.
- CE and C-Tick compliant
- Perfectly smooth dimming from 100% to Black.
- Digital AIR dimming ensures all luminaires across the installation fade to black smoothly, at the same time

SPECIFICATIONS

GENERAL

Operating Temperature	-10 to +45 °C, when correctly installed
IP Rating	IP 20
Dimensions H x DIA	350mm x Ø275mm approx
Weight	3.2kg approx

ELECTRICAL

Supply Voltage	100-240VAC, 47-63Hz
Max Wattage (incl driver)	65W (All colours @ 100% intensity) 55W (Incandescent mode)
Compliance	CE and C-Tick EN61347-1, EN61347-2-13, EN55015, EN60598-1:2003, EN60598-2-1:1989
Efficiency	PSU: 82-87%, Driver: 97%
Control	DMX 512 / RDM Option
DMX Connection	RJ45
Data Isolation	2kV Optical Isolation
Remote On/Off Control	Dry Contact Closure
Thermal Protection	Active thermal management by AIRLED driver
LED Driver Current	Multiple Channels and Currents: 350, 500, 700mA
AV PWM Resolution	Adaptive Variable - 14bit
Output Connection	Plug in wiring loom

OPTICAL

Output	Up to 2160lm (all colours @ 100% intensity depending on Optics Configuration)
CRI	≥ 90 @ 20-100% Brightness in Incandescent mode
Colour Temperature	Variable (1,700K to 2,600K in Incandescent mode) Settable (1,700 to 6500K in RGBWA Mode)

KIT CONTENTS

1x LDOH003-30M4-001	INCAND-AIR LED Downlight Engine
1x LDOH003-30-003	AIRLED RGBWA LED Driver – Suits LDOH003-30
1x LDOH003-30-004	PSU 24VDC 80W – Suits LDOH00 3-30
1x LDOH003-30-005	Internal Wiring Harness – Suits LDOH003-30

ACCESSORIES

1x LDOH001-24-006	DMX Termination Jumper
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