

LDOH005 INCAND-AIR 200 High Power LED Downlight



Description

Lumascap's INCAND-AIR 200 is a high power LED based downlight system developed for installation into the crown of the Sydney Opera House Concert Hall. The INCAND-AIR 200 replaces the existing 575W Par 64 Halogen downlights.

INCAND-AIR 200 features a specifically developed LED light engine based on a highly tuned array of Red, Green, Blue, White and Amber Luxeon LEDs.

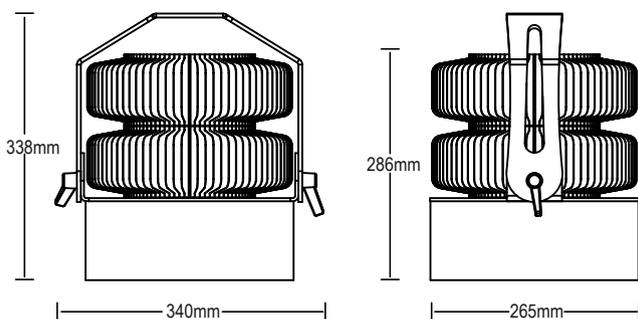
The INCAND-AIR 200 is capable of producing beautiful, high CRI whites of any CCT and accurately replicates the colour temperature shift that is characteristic of halogen lamps when dimmed. The use of RGBWA gives the added benefit of an ability to produce not only excellent whites, but rich, vivid colours.

INCAND-AIR 200 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 50,000 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.

Reliability is further increased by the remote location of the LED Driver and Power Supply. This removes the heatload of the LEDs from the power system, and the heat load of the Power System for the LED array. As an added benefit, the power system can be installed in a safe, easy to access remote location, allowing servicing without the need to access the LED Light Heads themselves.

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.



SPECIFICATIONS



GENERAL

Operating Temperature	-10 to +42 °C, when correctly installed as per instructions
IP Rating	IP 20
Dimensions H x DIA	286mm x Ø265mm approx
Weight	6.0 kg approx LED Light Head only
LED Driver and PSU	Located remote from LED Light Head

ELECTRICAL

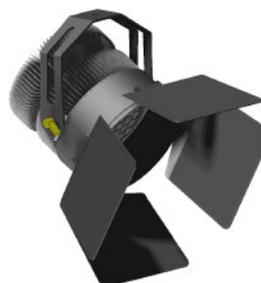
Supply Voltage	90-304VAC, 47-63Hz
Max Wattage (incl driver)	220W (All colours @ 100% intensity) 165W (3000K Incandescent mode)
Compliance	CCE and C-Tick EN61347-1, EN61347-2-13, EN55015, EN60598-1:2003, EN60598-2-1:1989
Efficiency	PSU: 82-87%, Driver: 97%
Control	DMX 512 / RDM Option
DMX Connection	RJ45
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, 700mA
AV PWM Resolution	Adaptive Variable - 14bit
Output Connection	Plug in wiring loom

OPTICAL

Output	Up to 10,600lm (all colours @ 100% intensity)
LED Colours	Red, Green, Blue, White, Amber
CRI	≥ 90 @ 20-100% Brightness in Incandescent mode
Colour Temperature	Preset Variable (1,700K to 3,000K) Infinitely Variable
Beam Angle	9.5°, 14°, 24°, 30°, 45°, 60° (factory set)

Kit Contents

1x LDOH005-200-002	Complete LED Light Head
1x LDOH005-200-003	AIRLED RGBWA LED Driver – Suits LDOH005-200
1x LDOH005-200-004	PSU 36VDC 260W – Suits LDOH005-200
1x LDOH005-200-005	Remote Cable Assembly 8m
1x LDOH005-200-006	Source Four Style C-Clamp
1x LDOH005-200-007	Barn Door Baffle Accessory (Optional)



LDOH005-200-007
Barn Door Baffle Accessory