

Armadillo LED - Evolution In Lighting

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RAi LED™ Street Lighting

Photocell & CMS Ready
10 Year Warranty



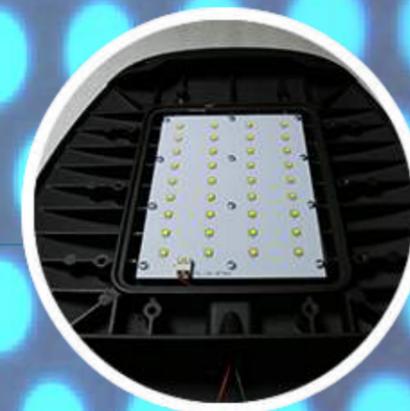
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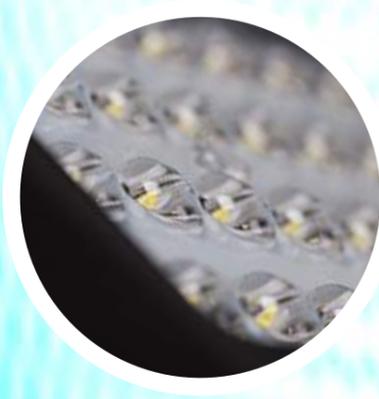
Modular Design

Easy assembly and low maintenance;
Replaceable and upgradeable;
Excellent thermal management.



Mechanical Structure

Flexible options
for alternative CMS systems
or LED electronic driver(s).



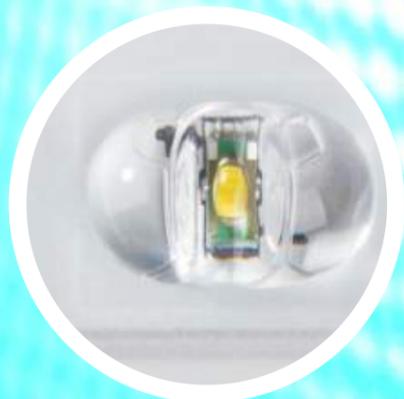
Optics & photometrics

Unique optics solution optimises the
light distribution to comply with road
lighting standards.



Power Supply

Worldwide certified universal
input voltage and frequency.
Over voltage and over
temperature shutdown.



Leds

High reliability and performance powered by
the best LED light source supplier;
LM-80 compliant;
L90F10 - 100,000hrs life time and lumen
maintenance.



Photocell

Available interface for the NEMA
photoelectric control unit (PECU),
or any NEMA socket control option.

RAi LED™ Street Lighting

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Easy Assembly on 60mm dia arm

Dusk till dawn Light sensor UL LISTED (optional)

- IP66 and IK10 Rated
- Compliance with ME, CE and S lighting classes
- Compliance with BS EN 60598-1
- The optical system of the Luminaire of IP rating in accordance with BSEN 60529
- Glare class in accordance with BS EN 13201
- Compliance with BS EN 13201
- Manufactured and Designed to ISO:9001 and ISO:14001

Optical specification:

Colour Temp.	4000K (Optional: 5000K)
Colour Render Index	>80CRI
Operating temp.	-40°C ~ +50°C
L90 F10	100,000hrs

Electrical Specification:

Input voltage:	120~277V 50/60Hz (Option: 347~480V 50/60Hz)
Power Factor:	>0.95
Dimming:	1-10V, DALi, PWM Optional, Easy CMS Intergration

Components and materials:

LED Light source:	CREE XP-G3 Series
Power supply:	OSRAM 4DIM
Housing:	Die cast aluminium
Heatsink:	Built In Thermal Management
Optic Lens:	PMMA
IP rating:	IP66 (BS EN 60529)
IK rating:	IK10 (BS EN 62262)

Ease of install and application, fit and forget. Simple scaling for the correct light levels by height, design and regulation, ArmadilloLED have a modularised approach to suit every lighting criteria, to maximise light energy efficiencies.

Enhanced optics and use of the latest CREE XP-G3 range of high output LED chips delivers, at last, a genuine cost effective LED Street Light solution. Additional control for the range can be delivered with integrated photocell and dimming, a class leading design from one of the UK's top LED lighting manufacturers.

Key Features and Benefits:

Mechanical structure and thermal management
Unique modern design available in any RAL colour on request
Easy assembly, easy installation, and low maintenance.
Modular design, replaceable and repairable LED light module(s).

Electrical and optics

Wide wattage options – From 30W up to 150W
Available for almost all types of road or area illumination applications, including Type I, II, III and Type IV light distribution.
Tool less access
Stand Alone Vmax 20kV 10kA SPD (Surge Protection Device)
Powder coating to EN12206-1:2004 Colour to BS4800:2011, Double Coated
Corrosion resistant marine grade aluminium alloy housing BS1490:1988_LM6 (EN1706:2010 / EN AC-44100)
UV Resistant (Ultra Violet) 100% UV-stable for a minimum of 100,000 hours
ASTM B117 Salt Spray Test – 1000hrs salt fog resistance.
Internal LED driver temperature protection
Constant lumen function (output) - CLF, CLO
Lamp operating counter
Thermal derating and protection
CMS Ready – DALi
Stand Alone control options:

- On/off operating mode
- AstroDIM feature
- StepDIM
- MainsDIM
- NEMA Socket and Dusk till dawn Photocell

Photometric Code: 840-359

Rated life (in h) of the LED module and the associated rated lumen maintenance (Lx) – 100,000hrs L80B10
GR0 - Risk Group (Control of Artificial Optical Radiation at Work Regs 2010)
Top assured safety and performance - UL E364004, FCC, CSA, TUV-GS CE, CB, RoHS, LM-79, LM-80 High reliability and high performance LED light source and LED power supply.
10 Years standard warranty as standard for complete luminaire
Successful LED road lighting application references all over the world.

- 4000k Kelvin colour temperature as standard
- Choose from input voltage solutions – 120~277Vac, 220~240Vac, 347-480Vac.
- Optional UNIQUE 480V+ Single / Three Phase Voltage protection (switch-off to stand by - 15 sec. restart mode)

LED technology with higher system efficacy achieving up to 60% or more energy savings than typical conventional HPS lighting solutions.

- Unique optics and photometric designs optimize the light distribution to comply with safety and road lighting standards in terms of illuminance, luminance, uniformity, glare control etc. Successfully retrofitting HPS road lighting solutions.

- Dynamic dimming options allows further significant energy savings during off peak hours.
- Optional intelligent wireless road lighting management system.

Technical Parameters

Optics & Photometrics

LED Color Temperature	4000k as standard (Optional: 5000K)
Color Rendering Index	Ra>80
Lamp Housing body colour	'Traffic Grey A' or 'Pure White' as standard. Other colours also available*

Electrical

Input Voltage	120~200~240~277V 50/60Hz	(Option: 347~480V 50/60Hz)
Power Factor	>0.95	
Power Supply	CREE XP-G3 Series LEDs + Meanwell LED Driver	

	LEDs	Lumen	System Wattage	lm/W
Single Module				
RAi 20W - 14 LEDs* (500mA)	14	2400	20	122.4
RAi 30W - 14 LEDs	14	4000	30	124.2
RAi 40W - 18 LEDs	18	5100	40	126.6
RAi 50W - 24 LEDs	24	6900	50	131.7
RAi 60W - 28 LEDs	28	7700	60	128.3
RAi 70W - 32 LEDs	32	8800	70	127.5
RAi 80W - 36 LEDs	36	9900	80	126.9
RAi 100W - 36 LEDs* (1050mA)	36	12800	100	124.3
Twin Module				
RAi 100W – 48LEDS	48	13300	100	131.7
RAi 120W – 56LEDS	56	15500	120	132.5
RAi 150W – 72LEDS	72	19950	150	133.9

Other

Operating Temperature & Humidity:	-40°C ~ +50°C/10~95RH
Classification:	IP66, Class I.
L90F10 hours @ 25°C:	100,000hrs

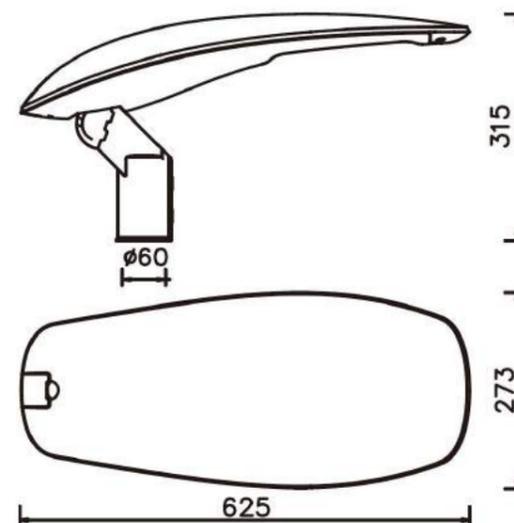
Main components

CREE XP-G3 Series LEDs + Meanwell LED Driver
Die cast aluminium alloy housing
Over Voltage protected (Options: Strike Voltage 480V Single phase protect)
Additional SPD with 10 year Warranty. Imax: 10kA - Vmax: 20kV

Product Images and Dimensions

RAi LED Single Module
30W-80W

Unit: mm

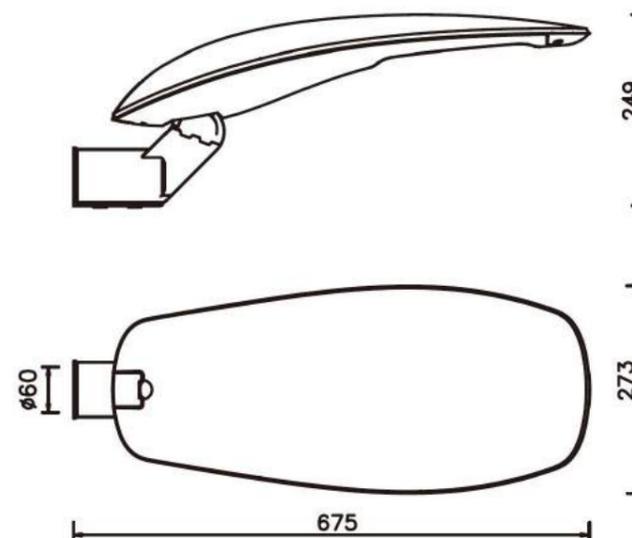


Single Module:
Max Windage Area (m) = 0.170
Max SCx Values by Side (m) = 0.066



RAi LED Twin Module
100W-150W

Twin Module:
Max Windage Area (m) = 0.184
Max SCx Values by Side (m) = 0.071



Profile height of lamp 105mm

Tool-less Board

The RAi LED™ Street Lighting now features a tool-less board for easy maintenance. The board simply locks in place via two lever clips, this also means the RAi LED™ is easily upgradable if any changes are to be made in the future.

CMS systems can also easily be upgraded ensuring little time is spent installing, reducing costs on equipment and personnel.

