

LM 120 Series

LED Architectural 5" Downlighting



Advantages of LM120

- Ultra bright industry leading **High Efficacy (lm/W)** Luminaire
- Energy efficient luminaire with a **Short ROI Period**
- **High CRI** with warm comforting soft light
- **Uniform Glare-Free** lighting without the uncomfortable LED “eye piercing effect”
- **Patented thermal solution** enables low LED Junction Temperatures (T_j) for maintenance free long life.
- 5-Year Limited Warranty
- **Dimmable** built-in LED driver with **Smart Circuitry** enables greater protection when used in unstable electrical grids
- **Indoor / Outdoor** all-in-one luminaire for retrofit or new construction
- Designed and Engineered in the **USA**

Application

- Residential
- Retail
- Hospitality
- Healthcare
- Schools
- Office

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Features

- LM120 Light Module is designed to last over 50,000 hours with a minimum of 70% Lumen Maintenance
- High lumen output & high efficacy
- Available in warm 2700 / 3000K, neutral 4000K and cool 5000K white
- Dimmable to 25% with selected dimmers
- Available in GU-24 Base for high efficacy line voltage sockets
- Suitable for recessed IC and non IC housings
- Indoor / outdoor: Ideal for damp locations

Housing

- Proprietary **Air-Flow Convection® System** designed to minimize heat and maximize LED life by reducing the junction temperature of the LED when used in environments exceeding 50°C (122°F)
- LM120 is manufactured using only the highest grade alloys and proprietary die-casting technology in the construction of the dome housing and heat sink to maximize performance and minimize cooling cost

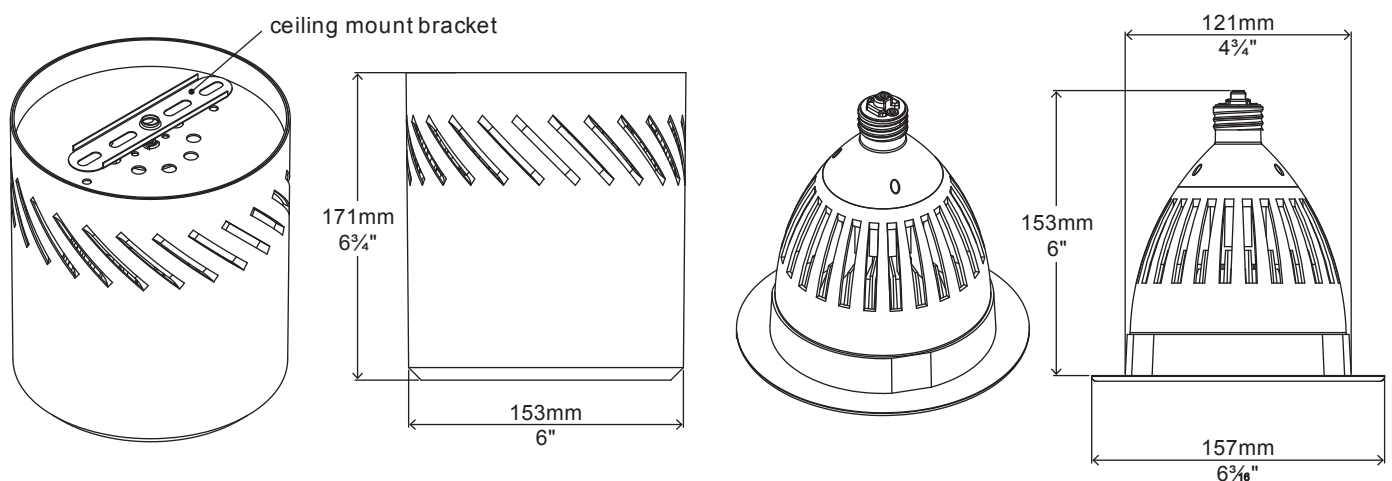
Electronics

- Patented MCPCB technology enables ultra low LED junction temperatures for maintenance free long life
- Integrated high efficiency LED driver and power supply
- Smart circuitry with surge and transient voltage protection
- Precisely controlled **constant current** draw for stable power source
- Powered by industry leading high brightness LED chip

Optics

- Proprietary reflector and optical diffuser system enables 120° glare-free comforting soft light without the uncomfortable LED "eye piercing effect"

External Dimensions



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Sockets

E26/27 Standard Edison Socket



GU-24 Base Socket



Mounting options



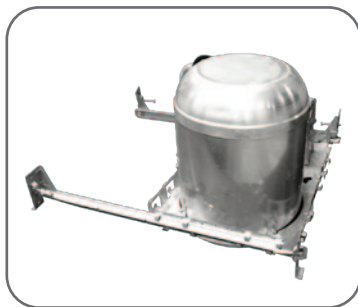
INDOOR CAN / RETROFIT

Part Number	Part Description
RH120	RH120 - Recessed Housing for Retrofit



SURFACE MOUNT / OUTDOOR CAN

Part Number	Part Description
SMH120G-W	LM120 GU24 Base Socket / Surface Mount Housing / Indoor / Outdoor / White



INDOOR CAN / NEW CONSTRUCTION

Part Number	Part Description
NH120	NH120 - Recessed Housing for New Construction

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Ordering Information

LM120	Series Voltage Socket			-	CCT Lip Length Trim Color			-	Mounting *
	Series	Voltage	Socket		CCT	Lip Length	Trim Color		
	120 150 200	1 = 110VAC 2 = 220VAC	E = E26/27 G = GU-24		27 = 2700K 30 = 3000K 40 = 4000K 50 = 5000K	L = Long Lip S = Short Lip	M = Mocha W = White		CA SA

* Mounting Options: United States & Canada select CA, otherwise select SA.

Example

Part Number	Part Description
LM122E-30LW-SA	13Watt 220VAC E26/27 Standard Edison Socket / Dimmable / 3000K Warm White / Long Lip / White Trim / Spring Arm

Packaging Information

Case Quantity	Dimensions (LxWxH)	Weight
12	61 x 41 x 41 cm 23 $\frac{5}{8}$ x 16 $\frac{1}{8}$ x 16 $\frac{1}{8}$ in	14.11 - 14.95 kg 31.04 - 32.89 lbs

LED Driver Electrical Specifications

AC Input: 110VAC or 220VAC / 0.3-0.15A / 47-63Hz	Output: 28VDC - 425mA
Input Inrush Current: < 10A / 115VAC, < 20A / 230VAC	Tolerance: $\pm 7\%$
Power Factor: > 0.94 at Full Load, 115VAC, 230VAC	MTBF(@25°C): >100,000 Hours, MIL-217F
Current Crest Factor (Ipk): 1.5 Max	Safety: UL1310 Class 2, CE, RoHS, TUV
Total Harmonic Distortion: 20% Max	Meet: EN55015, EN61547, EN61347-2-13, EN6100-3-2,
Efficiency: TYP 85%	EN61000-3-3, FCC Class B
Protection OCP, SCP, OVP - Auto Recovery	Surge Protection: 4KVAC / 3 seconds

Dimmable with Selected Dimmers and On/Off Step Dimming
 T1: 100%, T2: 75%, T3: 50%, T4: 25% (on/off time interval 1.5 sec).
 NOTE: All Values Have $\pm 7\%$ Tolerance

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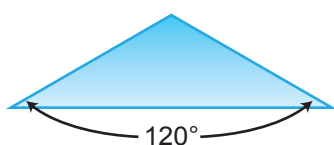
Specification

Input Voltage	110VAC or 220VAC / 0.3-0.15A / 47-63Hz
Fixture Watts *	13 Watt
Lumens (Total) *	1,200 Lumens
Efficacy *	92 Lumens / W
CRI	85
LED Model	Nichia
Light Beam Angle	120°
T _s - Solder Point Temp *	55°C
L70 Rating @ T _a 25°C	> 50K hours
Incandescent Equivalence	90 Watt
Lighting Control	Triac - 10% / Step - 25%
Warranty	5-Year Limited
Operational Temperature (T _a)	-40°C ~ 50°C
Storage Temp. / Humidity	-40°C ~ 80°C / 20 - 95% RH non - condensing

* Test data @ T_a: 25°C
 NOTE: All Values Have ±7% Tolerance



Illumination Levels



Height	LUX	FC
2m / 6.5ft	114	10.6
3m / 9.8ft	54	5
4m / 13ft	31	2.9
5m / 16.5ft	20	1.9

NOTE: Light Intensities Are Measured Directly Below The Fixture
 Using Clear Lens.
 All Values Have ±7% Tolerance.

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Photometry (LM79 Test Number LTL 32861)

Zonal Lumens and Percentages

Zone (°)	Lumens	% of Luminaire
0-30	306	38.47
0-40	471	59.26
0-60	710	89.43
0-90	794	100.00
40-90	324	40.74
60-90	84	10.57
90-180	0	0.00
0-180	794	100.00

NOTE: All Values Have ±7% Tolerance

Intensity (Candlepower) Summary

Angle	Mean CP	Lumens
0	417	-
5	415	40
10	406	-
15	392	110
20	370	-
25	340	156
30	305	-
35	266	165
40	224	-
45	183	141
50	145	-
55	110	99
60	80	-
65	57	57
70	38	-
75	22	24
80	10	-
85	2	3
90	0	-

NOTE: All Values Have ±7% Tolerance

Polar Plot

