

SynJet[®] PAR38 LED Cooler with HS

Features/Benefits

- Covers all your PAR38 LED cooling needs
 - Ultra high powered applications like High Bay
 - Low acoustic applications like Desk Lamps
 - Universal applications like General Lighting
- Meets PAR38 form factor
- 100K hours L10 life at 50C



Overview

SynJet[®] fanless air moving technology provides the most reliable active cooling solution available today. The SP38S family of SynJet[®] cooling modules has been developed by Nuventix Inc. for cooling an LED PAR38 lamp. It can be integrated with a wide array of electronic and optical solutions in the PAR38 form factor.

Specifications

Parameter	Θs-a ^{1,2,3}	SPL (dBA) ⁴	TDP ⁵ (W)	Power W (5V) ⁶
PAR38-Ultra High Performance, 60W Cooler	0.70	36	57	2.5
PAR38-High Performance, 45W Cooler	0.85	25	47	2
PAR38-Standard, 40W Cooler	1	22	40	0.95
PAR38-Low Power, 33W Cooler	1.2	18	33	0.6
PAR38-Silent, 27W Cooler	1.45	15	27.5	1

Parameter – All Modules	Min	Typ	Max	Units	Conditions
Voltage ⁶	4.75		5.25	VDC	150mV max ripple p-p
Power Lead					Power (Red wire) Ground (Black wire)
Operating Temperature	0		50	°C	
Storage Temperature	-40		75	°C	
Storage Altitude			15K	m	Above Sea Level
Relative Humidity (operating)	5		95	%	Non-condensing
Weight			425	gr	With heat sink
Agency Certifications					CE, UL , RoHS
Reliability ⁷			100K	hrs	L10 @ 50°C

¹ In fully open air or well vented fixtures from 25C to 50C in full on condition. Thermal data is given as a reference only. Actual performance may vary by application.

² Thermal resistance is measured from the bottom middle of the heat sink, with a heat source at least 15cm², to ambient air measured at the inlet to the SynJet.

³ SynJet Cooler is suitable for enclosed fixtures but thermal performance will vary depending on the enclosure

⁴ Per ISO 7779

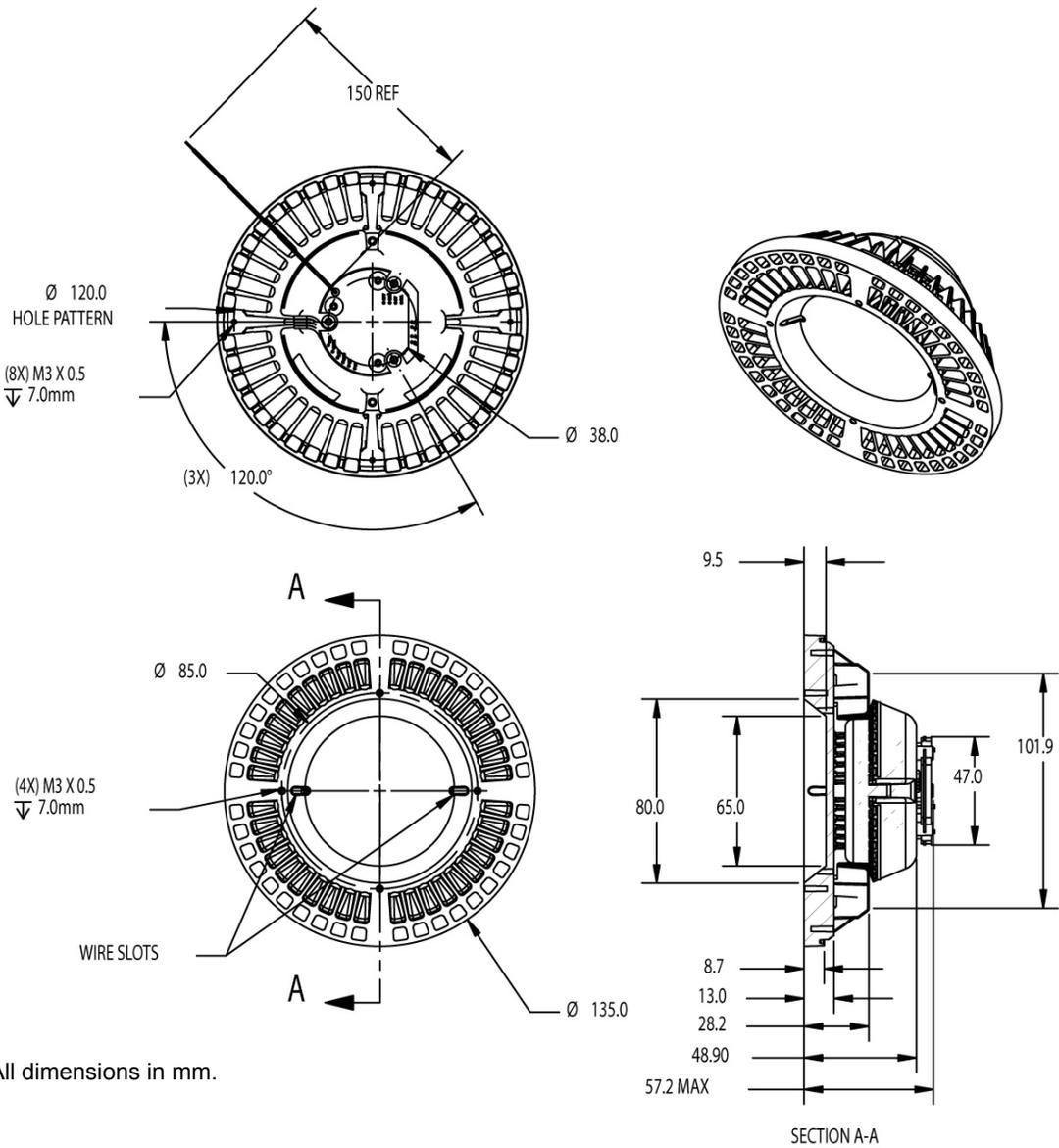
⁵ Total Design Power based on a 40°C delta in temperature

⁶ See Nuventix Design Guide for detailed power requirements

⁷ L10 is the life for which 90% of a group of modules will meet or exceed the specification

PRODUCT

Mechanical drawing



All dimensions in mm.

Part Numbers

PAR-38 Cooler	Document revision: 2.5
SP38S-CM005-015	SynJet, PAR38, – UHP 60W Cooler
SP38S-CM005-010	SynJet, PAR38, – HP 45W Cooler
SP38S-CM005-013	SynJet, PAR38, – Standard 40W Cooler
SP38S-CM005-012	SynJet, PAR38, – LP 33W Cooler
SP38S-CM005-011	SynJet, PAR38, – S 27W Cooler
HP38S-CALBL-001	PAR38 Heatsink

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