

SynJet[®] MR16 LED Cooler with HS

Features/Benefits

- Covers all your MR16 LED track light cooling needs
 - Ultra high powered applications like Spot Lights
 - Low acoustic applications like Desk Lamps
 - Universal applications like General Lighting
- Meets MR-16 form factor
- 100K hours L10 life at 50C



Overview

SynJet[®] fanless air moving technology provides the most reliable active cooling solution available today. The SM16S family of SynJet[®] cooling modules has been developed by Nuventix Inc. for cooling an MR16 lamp. It can be integrated with a wide array of electronic and optical solutions in the MR16 form factor.

Specifications

Parameter	Θs-a ¹²³	SPL (dBA) ⁴	TDP ⁵ (W)	Power W (5V) ⁶
MR16-High Performance, 20W Cooler	2.0	30	20	1.80
MR16-Standard, 15W Cooler	2.65	22	15	1.2
MR16-Silent, 12W Cooler	3.25	16	12	0.60

Parameter – All Modules	Min	Typ	Max	Units	Conditions
Voltage	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			120	gr	With heat sink
Agency Certifications					RoHS, CE, UL
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 1cm², 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

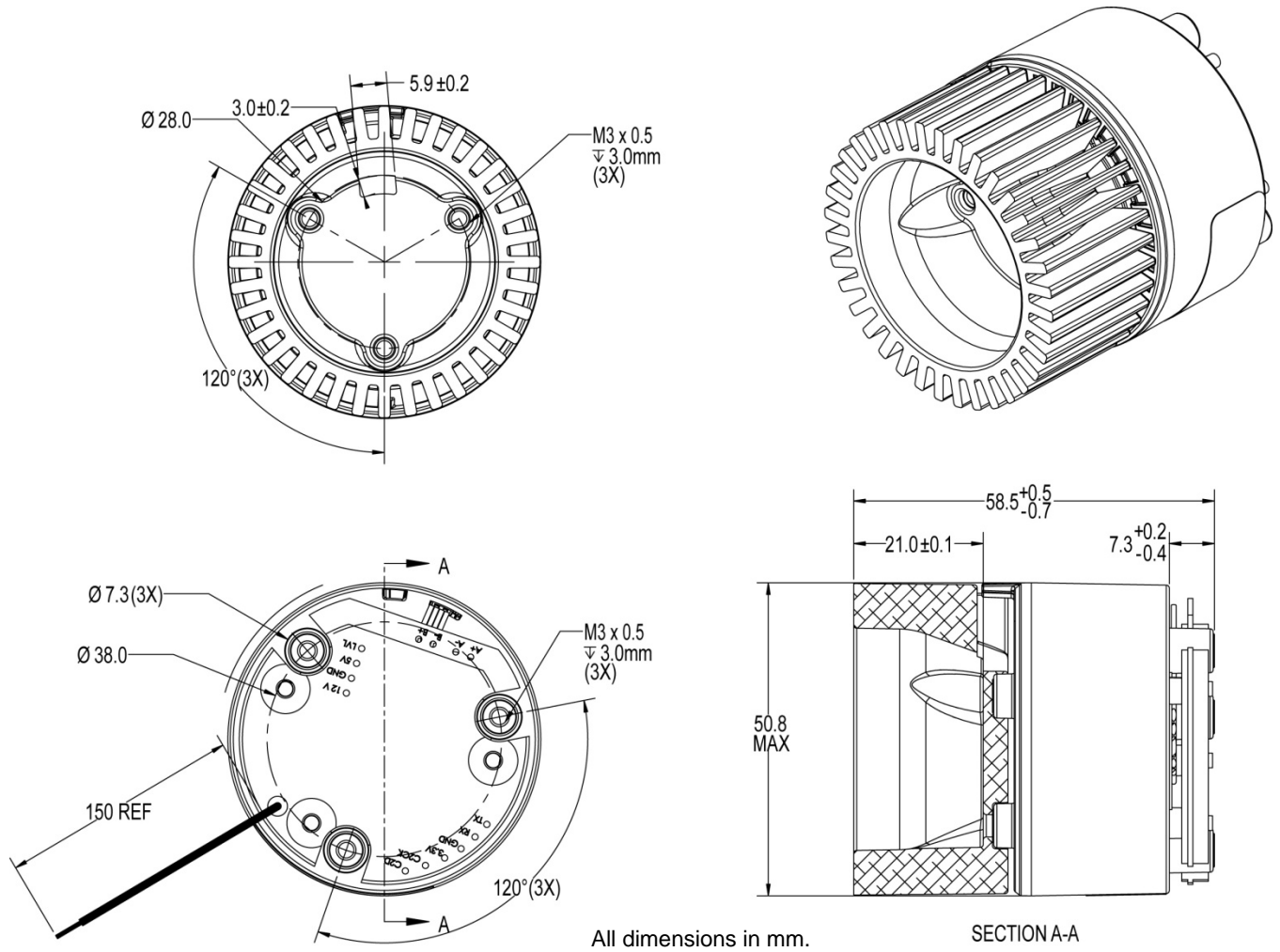
⁵ Total Design Power based on a 40°C delta in temperature

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



Part Numbers

MR-16 Cooler	Document revision: 2.3
SM16S-CM005-006	SynJet, MR16 5v – HP, 20W Cooler
SM16S-CM005-001	SynJet, MR16 5v – Standard, 15W Cooler
SM16S-CM005-007	SynJet, MR16 5v – S, 12W Cooler
HM16S-CALBL-001	MR16 heatsink

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