

# SynJet<sup>®</sup> MR16 LED Cooler

SynJet cooling technology provides the most reliable thermal management solution available. This LED cooler has been developed by Nuventix, for cooling tracklight, spotlight, and recessed downlight modules in the MR16 form factor.

- Only 50 mm diameter for small designs
- Cools up to 20W
- 100K Hours Lifetime
- Energy Efficient
- 5 Year Warranty



## Specifications

Parameter	Os-a <sup>123</sup>	SPL (dBA) <sup>4</sup>	TDP <sup>5</sup> (W)	Power W (5V) <sup>6</sup>
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 <sup>7</sup>			100K	hrs	L10 @ 50°C

<sup>1</sup> 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.

<sup>2</sup> Thermal resistance is measured from the bottom middle of the heat sink, with a heat source at least 1cm<sup>2</sup>, to ambient air measured at the inlet to the SynJet.

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

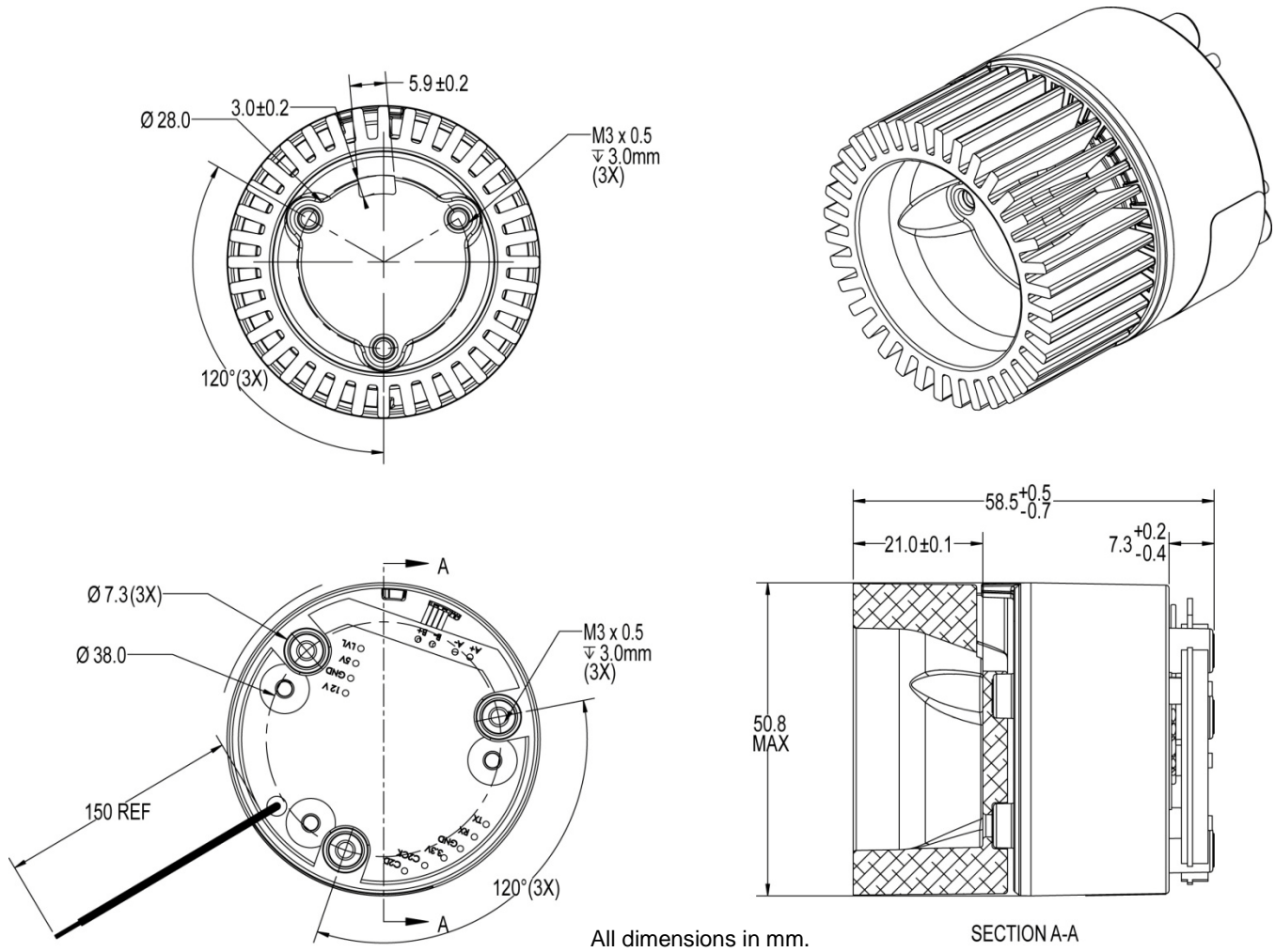
<sup>4</sup> Per ISO 7779

<sup>5</sup> Total Design Power based on a 40°C delta in temperature

<sup>6</sup> See Nuventix Design Guide for detailed power requirements

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

## 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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