

Low Profile Cooler with Heatsink

Features/Benefits

- Thermal loads from 10 to nearly 20W
- Low acoustic sound sensitive applications
- Ultra-low power
- Very low profile applications
- 100,000 hours L10 life at 60°C



Overview

Ntellijet™ fan-less air moving technology provides the most reliable active cooling solution available today. The Low Profile Ntellijet™ cooling modules JARO Thermal can be integrated with a wide array of thermal needs.

Specifications

	Θ_{s-a} ¹²³	SPL (dBA) ⁴	TDP ⁵ (W)	Power W (5V) ⁶
Low Profile – High Performance, 19W Cooler	2.1	32	19	1.10
Low Profile – Standard, 15W Cooler	2.7	25	15	0.90
Low Profile – Low Power, 12W Cooler	3.2	22	13	0.50
Low Profile – Silent, 10W Cooler	4.1	18	10	0.70

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		60	°C	
Storage Temperature	-40		75	°C	
Storage Altitude			15K	m	Above Sea Level
Relative Humidity (operating)	5		95	%	Non-condensing
Weight			125	gr	
Agency Certifications					CE, UL, RoHS
Reliability ⁷			100K	hrs	L10 @ 60°C

¹ In fully open air or well vented fixtures from 25°C to 60°C in full on condition with Cu heatsink.

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 Ntellijet™.

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

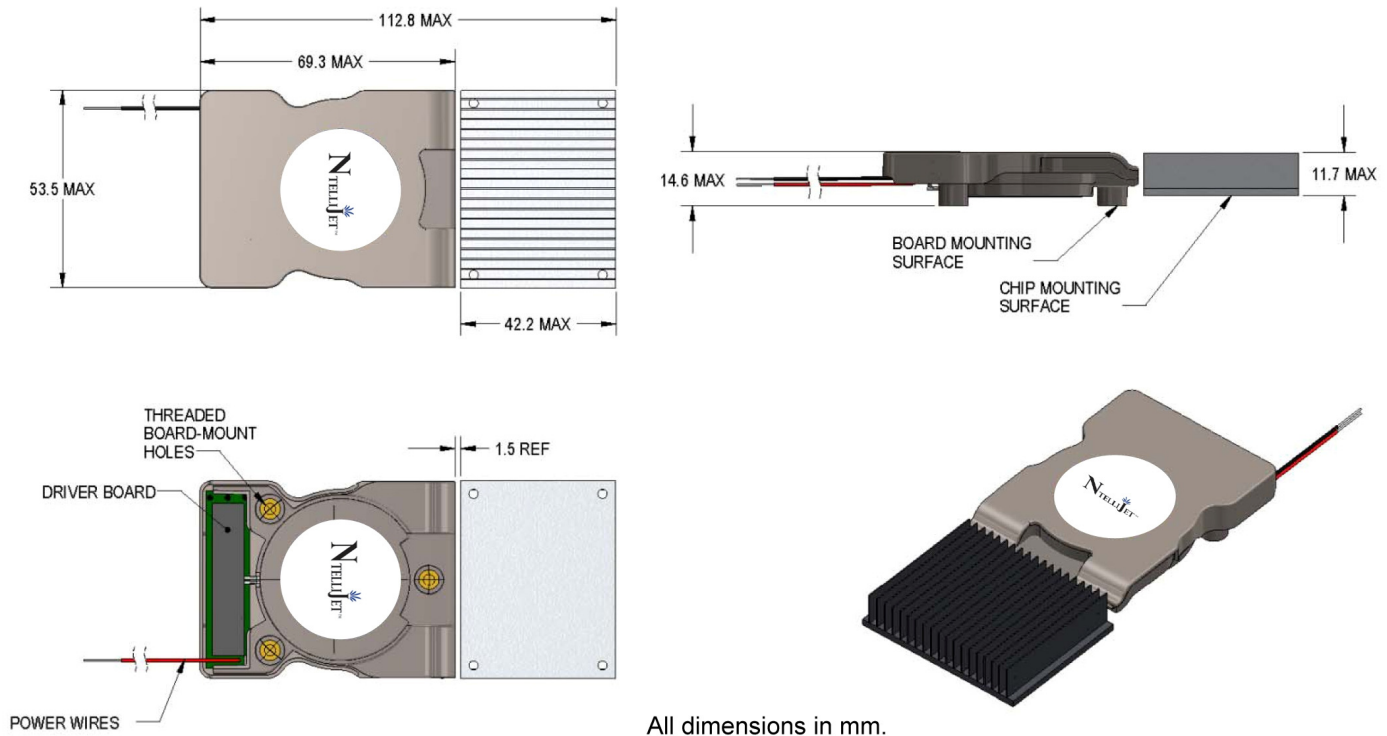
⁴ Per ISO 7779

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

⁶ See JARO Design Guide for detailed power requirements.

⁷ L10 is the life for which 90% of a group of modules will exceed the specified life.

Mechanical drawing



Part Numbers

Low Profile Cooler	Document revision: 2.3
NJ-LP0519	Ntellijet™, Low Profile Chip Cooler 5v – HP, 19W Cooler
NJ-LP0515	Ntellijet™, Low Profile Chip Cooler 5v – Standard, 15W Cooler
NJ-LP0512	Ntellijet™, Low Profile Chip Cooler 5v – LA, 12W Cooler
NJ-LP0510	Ntellijet™, Low Profile Chip Cooler 5v – S, 10W Cooler
NJ-LPAL	Ntellijet™, Low Profile Chip Cooler Heatsink, Al
NJ-LPCU	Ntellijet™, Low Profile Chip Cooler Heatsink, Cu

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