

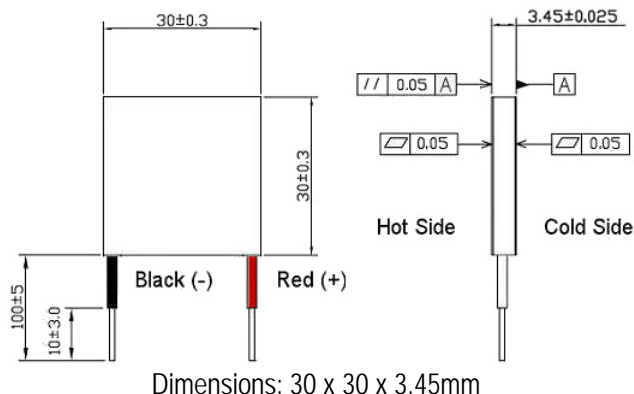


TM-71-1.4-8.5

Thermoelectric Cooling Module

Specifications (Hot-Side Temperature 27 °C)

I_{max} maximum current at ΔT_{\max}	V_{max} maximum voltage at ΔT_{\max}	Q_c_{max} maximum cooling capacity at I _{max} , V _{max} and $\Delta T = 0\text{ °C}$	ΔT_{\max} maximum temperature difference at I _{max} , V _{max} and Q _c = 0W	Internal Resistance
8.5 Amps	8.8 Volts	43 Watts	70 °C	0.85 $\Omega \pm 10\%$



Operating temperature range: -50 °C ~ +200 °C
(Solder melting point: +235 °C)

Thickness tolerance: $\pm 0.025\text{mm}$
Flatness and parallel variance: $\pm 0.05\text{mm}$
(Lapping to $\pm 0.01\text{mm}$ available.)

Standard lead wires: 20 AWG, Tin (Sn) plated at module interface, with a maximum temperature of +105 °C
(Other wiring options available)

Maximum recommended compression: 1Mpa

Ceramics: Alumina (AL₂O₃)
Available with metalized and tinned surfaces

Lot number (only) printed on the cold-side ceramic.

RoHS Compliant

[TM 71-1.4-8.5 Web Page](#)



TM 71-1.4-8.5 is a popular multi-purpose single-stage thermoelectric module with a 30 x 30mm footprint. It is intended for use from 5 to 8 Volt DC power sources and it's a solid performer.

TM 71-1.4-8.5 may be used for cooling, heating and thermal stabilization and is employed in a wide range of applications including including medical, analytical, laboratory & scientific instruments, electro-optics, telecommunications and military. A version for thermal cycling is available.

In electro-optic and photonic applications, TM 71-1.4-8.5 is commonly used to maintain a constant temperature in order to stabilize the wavelength of a diode, detector or sensor.

Standard Options (PN Suffix):

RTV Edge sealing = "RTV"
Epoxy edge sealing = "E"
Lapping to $\pm 0.01\text{mm}$ = "L"

(for example TM-31-1.4-8.5 "EL")

Contact sales@electracool.com for a quotation

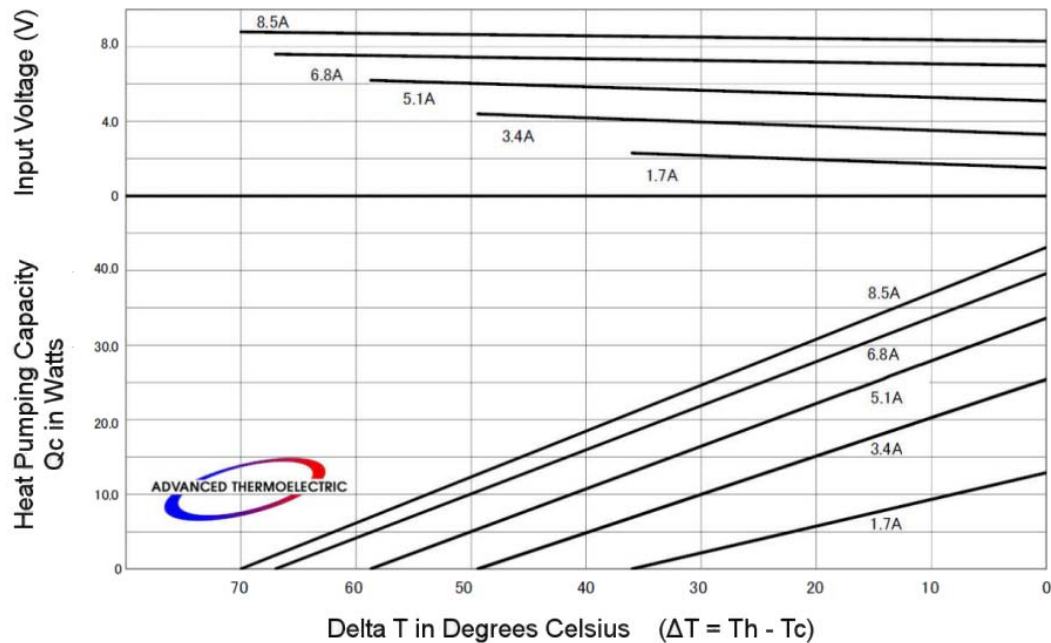
Advanced Thermoelectric, PO Box 1003, White River, VT 05001
toll-free 1-866-665-5434 (603) 888-2467 sales@electracool.com



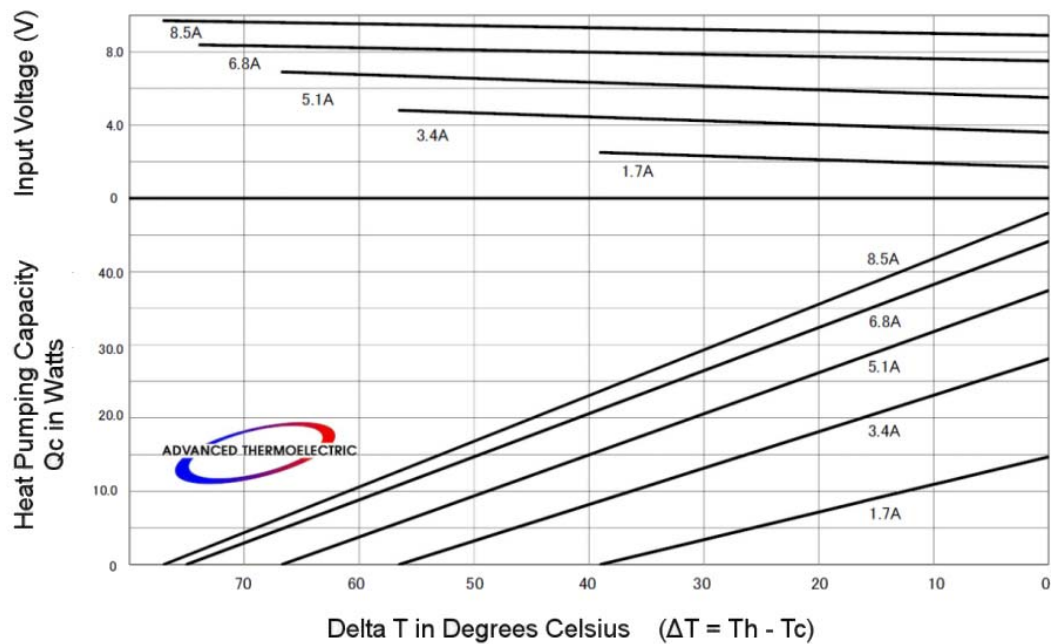
TM 71-1.4-8.5

Thermoelectric cooling Module

TM 71-1.4-8.5 Performance Curves $T_h = 27^\circ\text{C}$



TM 71-1.4-8.5 Performance Curves $T_h = 50^\circ\text{C}$



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