

THERMORACK 1000 FOR NON-AQUEOUS FLUIDS

Precision Thermal for Laser, Analytical and Military Applications



Rack-mount Thermoelectric Recirculating Chiller for Leak-Free Temperature Control of Non-Aqueous Fluids

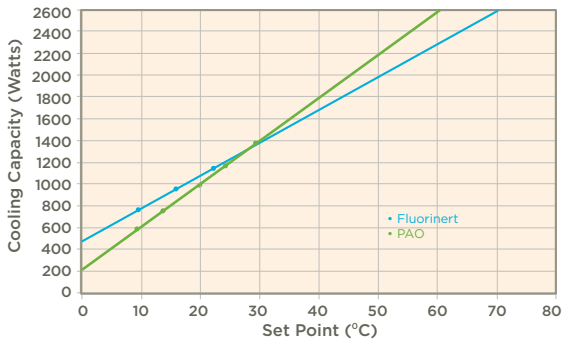
Applications:

- Avionics bench testing
- In-flight cooling
- Military test equipment (PAO)
- Laser and analytical equipment
- Other higher capacity applications

The Right Temperature Without Fail

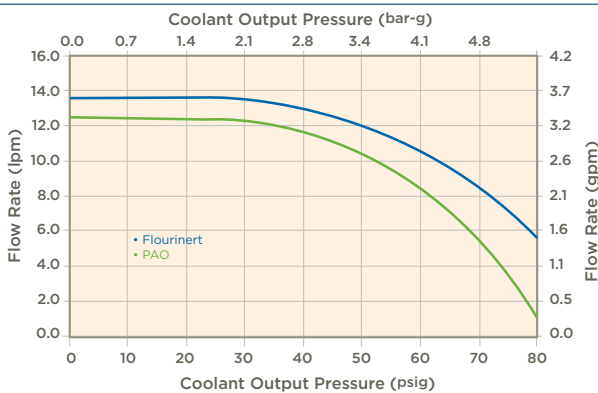
Solid State Cooling Systems

THERMORACK 1000 COOLING CURVE
20 °C AMBIENT



Note: Cooling Capacity will vary with configuration

THERMORACK 1000 PUMP CURVES
20 °C, NOT DENSITY CORRECTED



Thermoelectric reliability designed for leak-free temperature control of Non-Aqueous Fluids

ThermoRack 1000 for non-aqueous fluids delivers precise, Freon-free thermal control to $\pm 0.1^\circ\text{C}$, even near ambient, and with only two moving parts, it is whisper quiet and vibration free.

The air-cooled ThermoRack requires no house or facility chilled water. It operates within the most energy-efficient range of a core of thermoelectric modules with lifetimes exceeding 200,000 hours. And our variable voltage power control means even greater efficiency, drawing power only as you need it.

ThermoRack 1000 for non-aqueous fluids is built with an all stainless steel tank and plumbing with Swagelok fittings for leak-free use. It is compatible with either aircraft hydraulic fluid (PAO) or Fluorinert, and it is air cooled, so it needs no house or facility chilled water. The standard pump is capable of delivering up to 50 psig for avionics and other high-pressure applications. Other pump types are also available.

ThermoRack comes with a universal input standard for worldwide power compatibility.

SPECIFICATIONS

Operating Range	0 °C to 65 °C
Ambient Temperature	10°C to 40°C non-condensing
Repeatability	$\pm 0.1^\circ\text{C}$ (even near ambient)
Cooling Capacity	1000 watts @ 20 °C (20 °C ambient)
Coolant/Process Fluid	PAO (Poly-Alpha-Olefin) or Fluorinert/Galden
Process Fluid Fittings	3/8" Swagelok
Pump	Magnetically-driven rotary vane pump, Flow: >12 lpm @ 30 psig
Tank Volume	1.5 liter with level sensor
Wetted Materials	Al, stainless steel and polymers

Size (L x W x H)	19" x 27" x 11" 6U (48 x 69 x 27 cm)
Weight	96 lbs (44 kg)
Power Input	200-240 VAC 1 phase, 50/60 Hz, 10 amps max
Power Inlet	AMP with 20 ft (6 m) cord
Communications	Keypad, RS232 or Interface
Alarms	Temperature, fluid level, system or component failure (display, dry contact or RS232 option)
Standards	TUV listed to UL, CAN/CSA and EN 61010-1, CE 61010-1
Warranty	2 years

SOLID STATE COOLING SYSTEMS