

# OASIS 160

## Ultra-Compact Thermoelectric Recirculating Chiller



### The World's Smallest Recirculating Chiller

- **Compact size:**
  - Only 8 lbs (3.5 kg)
  - 7.5 x 5 x 7" (19 x 13 x 18 cm) (L x W x H)
- **Precise: 2 - 45 °C setpoint with  $\pm 0.1$  °C control**
- **Provides 160 W of cooling power**
- **Very energy efficient: uses less than 200 W of DC power**
- **Reliable thermoelectric chiller**
- **Diode lasers and CCD cameras**
- **Medical and laboratory equipment**



# Oasis™ 160

## Ultra-Compact Thermoelectric Recirculating chiller

### Why Choose Oasis?

The Oasis offers ultra compact size, quiet operation, precise temperature control, energy efficiency and high reliability.

### Reliable Thermoelectric Technology

The Oasis incorporates thermoelectric technology, widely used throughout the world for 50 years in various applications from spacecraft to home appliances. With lifetimes exceeding 200,000 hours, the thermoelectric modules at the core of this chiller make for ultra-high intrinsic reliability.

### Lower Heat Load

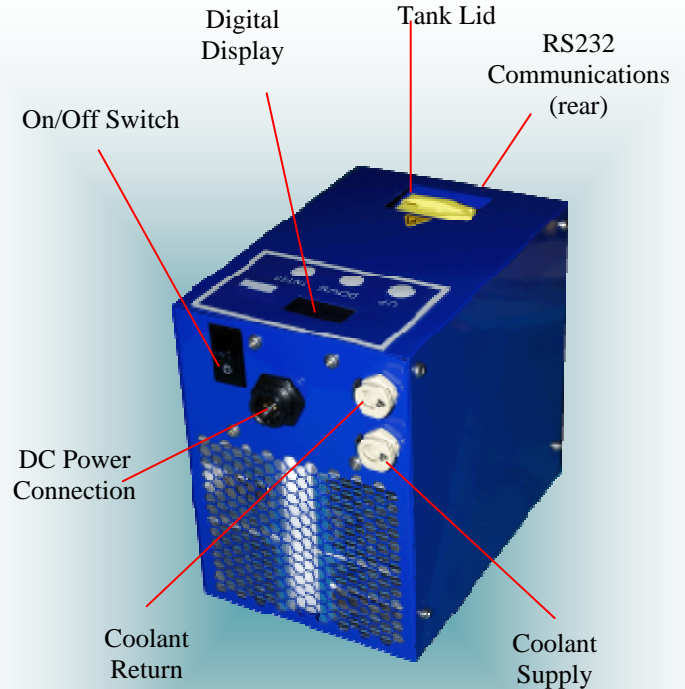
Oasis is available with a 160-Watt capacity, well below the economical range of refrigerant-based chillers.

### Precise Temperature Control

Because electrons transfer the heat, Oasis responds instantaneously to changes in load. The digital PID temperature controller holds to  $< +0.1$  °C, even near ambient.

### Energy Efficiency

Oasis is very energy-efficient. Its thermoelectric modules are powered by a variable voltage power supply that provides the minimum power required to control the temperature at set point, so Oasis only draws as much power as needed. It is also designed to operate in the modules' most energy-efficient range.



## Specifications Summary

<b>Set Point Range:</b>	2 to 45 °C
<b>Control Accuracy:</b>	$\pm 0.1$ °C with a constant load
<b>Cooling Capacity:</b>	160 Watts @ 20 °C in a 20 °C ambient
<b>Power Supply:</b>	200 W Universal Input (13.5 VDC, 14.5 amps)
<b>Coolant Pump:</b>	450 ml/min @ 10 psi brushless DC gear
<b>Coolant:</b>	25% propylene glycol preferred, ethylene glycol solutions also acceptable
<b>Connections:</b>	1/8" hose barb Colder quick disconnect with shut-off valves
<b>Tank Volume:</b>	75 ml
<b>Dimensions:</b>	7.5 x 5 x 7" (19 x 13 x 18 cm) (L x W x H, plus fittings)
<b>Weight:</b>	8 lbs (3.5 kg)
<b>Communications:</b>	Dry contact alarm and RS232
<b>Certifications:</b>	CE/UL 61010-1 2004
<b>Warranty:</b>	1 year

