

# Cool Red (Infrared Light Source)

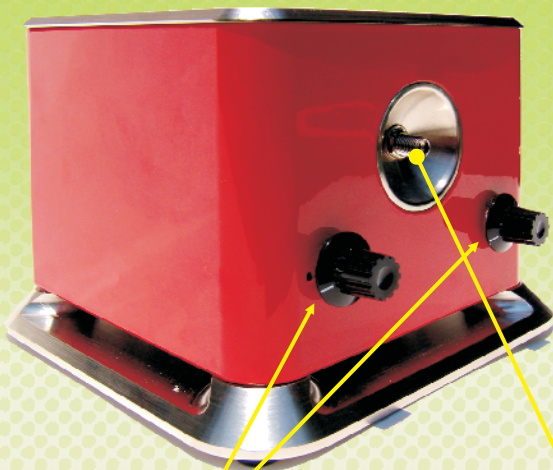
# SANDHOUSE

DESIGN

innovative products for fiberoptic sensing

SandHouse Design Copyright 2009©. Rev. 08/09. Prices subject to change without notice.

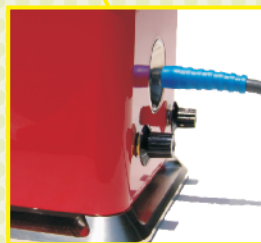
Front



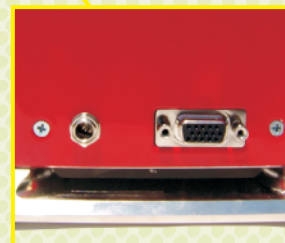
Top/Back



SMA Fiber Output



Mode Switch & Intensity Adjustment  
and Fiber Coupling



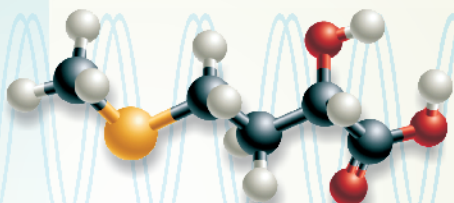
Interface Connection  
and Power Source

The "Cool Red" borrows its name from stars that emit light mostly in the infrared part of the spectrum. It's designed to fill the need of light sources for infrared fiber based spectroscopy. The Cool Red accomplishes this by a unique optical and thermal design that couples light energy from a silicon Nitride emitter glowing at 1500 °Kelvin.

The Cool Red source works great as a compliment to Sandhouse Design's SIR line of mid-infrared analyzers, or in any general application where high intensity infrared light is needed.

This light source offers many unique features and an ergonomic design. For systems that require optical modulation, an integrated optical shutter can be modulated at frequencies of up to 200hz. The shutter can be driven externally through a 15 pin digital interface. If no external drive is available, the shutter can be driven internally by an integrated adjustable square wave generator. The frequency can be continually adjusted through the control knob on the front panel from .5hz to 200hz.. The digital output for this signal can be taken from the same 15 pin interface and used to synchronize other devices.

See back for technical info and pricing ↪

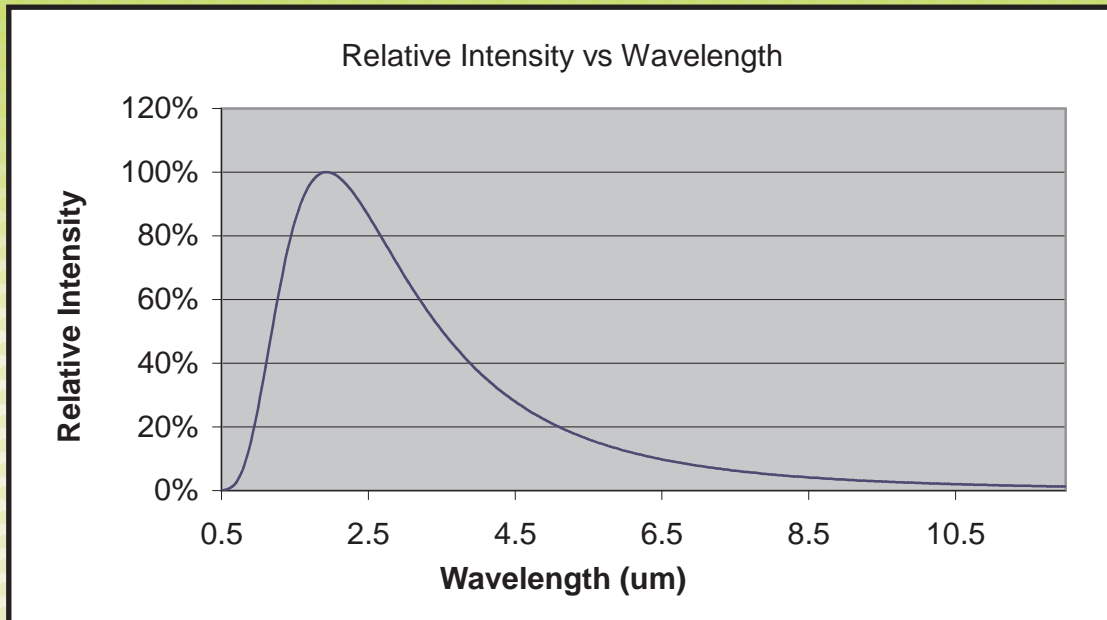


**For Orders or Inquiries**  
Call (727) 738-4477 or Fax (727) 342-7304

[info@SandhouseDesign.com](mailto:info@SandhouseDesign.com)

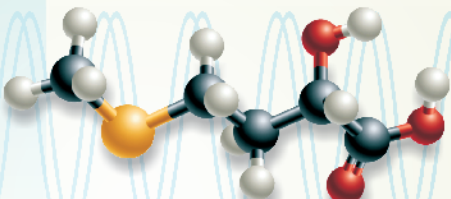
SandHouse Design, LLC Dunedin, Florida U.S.A.

### Intensity Profile



### System Specs

Lamp	Material	Silicon Nitride (Si3N4)	
	Temperature	1500 °K	
	Lifetime	2,000 hours	
	Warm-up time	12 seconds	
	Power	50 Watts	
	Shutter	Shutter frequency	200hz
Additional Info	Replacement lamps	CR-Lamp-50W	\$129.00
Power supply requirements	5 amps, 24 volts		
	5.5mm Od/3mmID		
	Universal input power supply included		
Dimensions	5" x 5" x 4.5"		



**For Orders or Inquiries**  
Call (727) 738-4477 or Fax (727) 342-7304

[info@SandhouseDesign.com](mailto:info@SandhouseDesign.com)

SandHouse Design, LLC Dunedin, Florida U.S.A.