

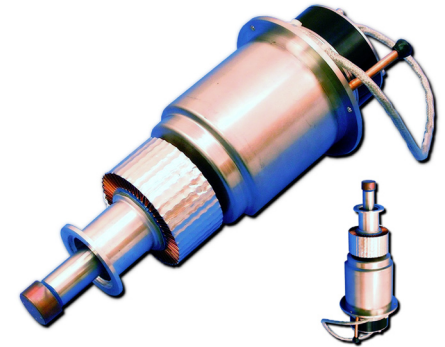
# Sapphire Cryocooler

## Product Overview:

Sapphire is a compact, high performance and extremely reliable cryocooler. It uses an integral free-piston Stirling cycle design and is currently being used to cool high temperature superconducting (HTS) materials in STI's SuperLink® product-a high performance receiver used in the telecommunications industry.

## Features and Benefits:

- > MTBF > 1,000,000 hours
- > More than 6,000 in field running 24/7
- > More than 230,000,000 run-time hours
- > Hermetically sealed
- > Operational at any orientation
- > Small and compact
- > No maintenance required



## Applications:

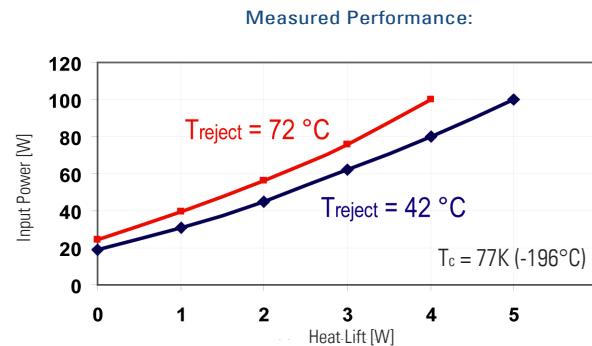
Sapphire can be used for a variety of applications where low cost, high reliability, high performance and long life are important or critical.

Some applications include, but are not limited to, the following:

- > Computer CPUs
- > Low noise RF receiver front ends

## Performance:

- Weight: 6.2 lbs. (2.8 kg)
- Size: 3.6 in. OD x 11.8 in. Length (92mm OD x 300mm)
- Temperature range: -40°C to 60°C
- Cooling capacity: 5W @ 77K



## Contact:

For pricing and availability contact:  
**Abhijit Karandikar**  
*Product Manager*  
 Phone: (805) 690-4621  
 Email: [Abhijit@suptech.com](mailto:Abhijit@suptech.com)

Superconductor Technologies Inc.  
 460 Ward Drive Suite E  
 Santa Barbara, CA 93111  
<http://www.suptech.com>