Recirculating Gas Cooler RGC4

The Janis SuperTran product line has long been an industry standard for continuous flow cryogenic systems. Now, with the introduction of the Janis Recirculating Gas Cooler these cryostats can be cooled without the need for liquid cryogens.

- All the flexibility and convenience of a continuous flow cryostat without liquid helium
- Fast sample change without warming up the RGC4 cooler
- Excellent thermal performance
- Low vibration – vibration data available upon request
- Compatible with most existing SuperTran cryostats
- Order a new cryostat with a transfer line and choose to operate using LN$_2$, LHe or cryogen free

Standard Features
- Pulse tube or GM cooler
- Cryocoolers with 1 W, 1.2 W, 1.5 W or 2W cooling at 4.2 K available
- Integrated gas handling
- Dry scroll pump for gas circulation

Compatible with
- ST-100 optical workhorse
- ST-200 non-optical system
- ST-300 compact unit for use in a magnet
- ST-400 UHV configuration
- ST-500 microscopy configuration
- ST-500 based probe station
Recirculating Gas Cooler RGC4

**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
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<tbody>
<tr>
<td>Temperature range (depends on cryostat model)</td>
<td>&lt;4 K – 800 K</td>
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<tr>
<td>Temperature stability</td>
<td>± 50 mK @ &gt;5 K</td>
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<tr>
<td>Initial cooldown time to 4 K</td>
<td>~3 hours</td>
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<tr>
<td>Subsequent cooldown time after sample change (300 K to 4 K)</td>
<td>&lt;60 minutes</td>
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</table>

**Cryostat Options Include**

- UHV sample environment
- RF or DC electrical feedthroughs and wires
- Alternative window materials
- Transmission geometry
- Integration with spectrometers
- Compact geometry
- Piezo positioning stages
- Short working distance
- Integrated objective lens
- Large sample volume
- Permanent and rare earth magnets
- Diamond anvil cell (DAC)

Vibration measured on a standard ST-500