



Adiabatic Demagnetization Refrigerators

Our ADRs offer a fast and reliable way to get into the milliKelvin range. Optimized for easy access, small and easy to handle, it can be a real workhorse for your lab.

- Based on 0.5/1W pulse-tube coolers
- Vibration isolation at 70K and 4K
- Variable sample spaces available
 - Ø 230 x 300mm (M-series)
 - Ø 300 x 400mm (L-series)
- Optical ports
- Sample magnets
- Magnetic shielding



Single-stage salt pill ADR unit (GGG)	Double-stage salt pill ADR unit (FAA/GGG)
■ Lowest temperature: < 600mK	■ Lowest temperature: < 40mK
■ Hold time at 1K: > 48h	■ Hold time at 100mK: > 48h
■ Temperature deviation at 1K: < 1%	■ Temperature deviation at 100mK: < 25µK (rms)
■ Recharge time: < 2h	■ Recharge time: < 1h

Adiabatic Demagnetization Refrigerators

ADR M-series

Based on a 0.5W pulse-tube cooler with separate rotary valve.

- Ø 230 x 300mm sample space
- Optical side ports



ADR L-series

Based on a 1W pulse-tube cooler

- Ø 300 x 400mm sample space
- Line-of-sight ports down to 4K
- Integration of magnets up to 9T
- Optical side ports



Top flange

The customer area at the top flange can be individually arranged and offers freedom to implement many different feedthroughs.



Vacuum can and shielding

The length of these parts can be optimized for your application and optical ports in various sizes can be offered. Our standard port sizes are

- 2 x Ø 50mm in the vacuum can
- 2 x Ø 40mm at 70K
- 2 x Ø 30mm at 4K



Experimental wiring

We deliver all the experimental wiring installed with hermetic feedthroughs and heat sinking on all relevant cooling stages.

- Manganin (Ø 100µm)
- NbTi/CuNi (Ø 100µm)
- Semi-rigid and flexible coaxial cable
- Glass fibre

Customized clamps are delivered for heat sinking at the ADR salt pill stages.



Rack Option 1:

- 19" Rack 600 x 600 x 800mm (l x w x b) with 3HE free space for your experimental equipment
- Monitor and keyboard on top of the rack

Rack Option 2:

- 19" Rack 600 x 1600 x 800mm (l x w x b) with 10HE free space for your experimental equipment
- Monitor and keyboard rack mounted

Customization

For all our cryostats we offer a high level of customization and integration of experimental setups, including

- SQUID applications
- Superconducting detectors
- Optical applications
- Magnet integration

Electronics and Software

Fully featured setup with

- Thermometry
- Resistance bridge
- Magnet power supply



- Regulation at base temperature
- Recharge with temperature safety control
- Continuous temperature and data logging
- Full system diagnostics

Just tell us what you need. The modular design of the complete system allows us to implement customer wishes very easily.