The Model 107 K2 adiabatic demagnetization refrigerator (ADR) is specially designed for experiments needing high cooling power. By employing a Helium-3 cooler that offers a low 300 mK intercept, more of the ADR cooling power can go towards your experiment. This mid-sized research cryostat features an experimental volume of 34 cm in diameter and 20 cm tall. If your cooling needs are greater than a standard ADR, but still less than a dilution refrigerator (DR), the Model 107 K2 may be just the ticket.
Research cryostat
Model 107 K2

Features:

- Helium-3 backed, single stage ADR (Adiabatic Demagnetization Refrigerator)
- ADR cryostat with high-powered 300 mK intercept
  Kevlar suspension
  30 mK stages
- Optimized for versatility and flexibility
  2X NW50 user ports on top flange
  2X NW40 user ports on top flange
  1X NW25 user ports on top flange
  1X Ø150 mm user port on vacuum jacket bottom
- Nickel plated aluminum thermal shields (50 K, 4 K)
- Quick release vacuum jacket flanges
- Electronically controlled motorized heat switches
- Vibration minimizing design
- Remote rotary valve motor
- Custom service stand (option)
  Allows for transport & servicing
  76 cm of height adjustment

Specifications:

- Large cooling capacity (~15 Joules) at 300 mK
- Large capacity FAA salt pill (~70 cc)
- Pulse-tube stage temperatures of 50 K and 2.7 K
- 900 mW cooling power at 4.2 K
- ADR base temperature of 27 mK
- >300 hour no-load regulation at 100 mK

Bottom view of 107 K2 ADR cryostat showing
pulse-tube cooler and feedthrough flanges.