



Even this bird would be cold at cryogenic temperatures. Orchid designed cryogenic equipment that monitors and regulates cryogenic temperatures between 4 and 70 degrees Kelvin.



“No room for error. Cryogenics must run 24/7 without failure. Orchid’s team worked 24/7 to make our products an unqualified success. Rapid design and development is Orchid Technologies through and through.”

- President
- Control Systems

Cryogenic Pump Control

Cryogenic pump control requires input from a number of unusual cryogenic temperature and pressure sensors. Silicon diode temperature sensors are accurate at temperatures below 10 degrees Kelvin. Thermocouple pressure sensors provide accurate gas pressure measurements down to 1 micron. Combined sensing systems permit the control of cryogenic instrumentation with a high degree of accuracy. Orchid developed low noise, accurate sensing systems to control cryogenic equipment near absolute zero.

Rugged and Reliable

Operation in high reliability demanding industrial environments was essential. High quality, fail safe operation necessitated careful circuit design and implementation. Firmware redundancy, self checking software, and CRC protected data storage make up some of the high reliability measures taken during system design.

Listening to Customer Requirements

Orchid’s ability to listen and translate customer requirements into working products makes us successful again and again. Cryogenic pump control is a specialized art. Careful listening to customer needs coupled with product planning and design contingencies made the rapid design of this controller possible.

Orchid Technologies — We Won’t Leave You Cold

The development of custom electronics technology solutions for our OEM clients is Orchid’s entire business. High-performance Custom Instrumentation Design with rapid design cycles, demanding technical requirements, and unforgiving schedules set us apart. Call Orchid Technologies today. We’ll put a custom instrumentation system in your hands tomorrow!

