



LN₂ Cooled Portable Process Chiller Cryogenic Based Chillers for Applications Requiring Rapid, Ultra-Low Temperature Cooling

The portable, LN₂-cooled chiller controls and delivers the cooling power of liquid nitrogen for fast, precise, ultra-low temperature process cooling.

Cryo Chillers are used in an assortment of industrial and commercial applications including Defense, Aerospace, Chemical, Semiconductor, Pharmaceutical, Automotive, and Medical. In many applications, a Cryo Chiller is a simpler and more cost effective cooling solution, delivering a high ratio of capacity to system footprint.

Advantages of LN₂ Cooled Chillers

Increased Cooling Capabilities

- LN₂ chillers deliver lower temperatures and more cooling capacity in smaller footprint systems
- On-demand cooling, LN₂ usage is automatically adjusted to meet needs of dynamic heat loads
- Cool jacketed vessel or in-line flow in a “tankless” configuration

Reduced Costs

- Lower capital investment and installation costs than low temperature mechanical chillers.
- Energy efficient, significantly less electricity consumption

Improved Reliability

- Fewer mechanical components, LN₂ chillers are more reliable and easier to maintain.



Description: LN₂ cooled, liquid chiller to provide 20 kW of cooling @ -90°C @ 5 GPM @ 30 psi

General Specifications

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|------------------------------|---|
| Heat Rejection | LN ₂ Cooled |
| LN ₂ Consumption | LN ₂ consumption automatically adjusts to meet cooling demands |
| GN ₂ Exhaust Port | 6" ID Duct |
| Power | 220V, 3 Phase, 50Hz, 15A Service |
| Process Fluid | 3M Novec 7000 |
| Wetted Materials | Hard plumbed copper/stainless |
| Flow Rate | 5.0 GPM @ 30 PSI |
| System Dimensions | 64"H x 22"W x 28"D |
| Reservoir Size/Type | Sealed Stainless Steel |
| Ambient Temperature Range | 18°C to 27°C (23°C Nominal) |

