

LIQUID NITROGEN GENERATORS

CRYOCOOL-LN

Air In - Liquid Nitrogen Out



Liquid Nitrogen Generators

[CRYOCOOL-LN10/20/32](#)

Make your own liquid nitrogen from the room air

Make up to 32 liters per day of liquid nitrogen.

Reduced safety risks by eliminating storage and use of high pressure tanks and cylinders

No more waiting for deliveries

Eliminates the cost of buying liquid nitrogen

Air in - Liquid Nitrogen Out



The Liquid Nitrogen Generator (LN10, LN20 & LN32)

Nitrogen gas is extracted from the air and liquefied (if optional nitrogen gas generator is purchased).

Nitrogen gas enters the refrigerator at the top and exits as liquid nitrogen at the nozzle of the flexible stainless steel transfer line. The liquid nitrogen is transferred through a vacuum insulated flexible transfer line out the nozzle into a storage dewar or for direct cooling - wherever 'cold' is needed.

The Cryocool-LN series is available in three different models:

- Cryocool-LN32: Makes 32 liters of liquid nitrogen per day
- Cryocool-LN20: Lab Model LN20 makes 20 liters day
- Cryocool-LN10: Personal Model LN10 makes 10 liters/day

Our liquid nitrogen generators use proven and reliable GM Refrigerators



The Closed Cycle Refrigerator

The refrigerator operates on the Gifford-McMahon (GM) gas expansion cycle. A compressor circulates helium gas in an internal closed loop back and forth, to and from the refrigerator.

This compressed gas is cooled by expansion, providing the cooling needed for liquid nitrogen generation. Just add electricity and water (for compressor cooling). The loop is 'closed cycle', which means helium gas does not need to be added.

Pressure swing style nitrogen gas generator for highest purity - 99.5%



Optional Nitrogen Gas Generator

Nitrogen gas is extracted from the air using PSA (Pressure Swing Adsorber) technology providing higher purity nitrogen gas than membrane type systems. Optional built-in and sound proofed oil free compressor removes reliance on house compressed air. No manual handling and storage of high pressure cylinders means reduced safety risks and convenience.

- A continuous stream of clean dry nitrogen gas with consistent purity
- Easy to operate - nitrogen gas at the push of a button

LN2 flows out, Stand-alone flow out (spigot) design.

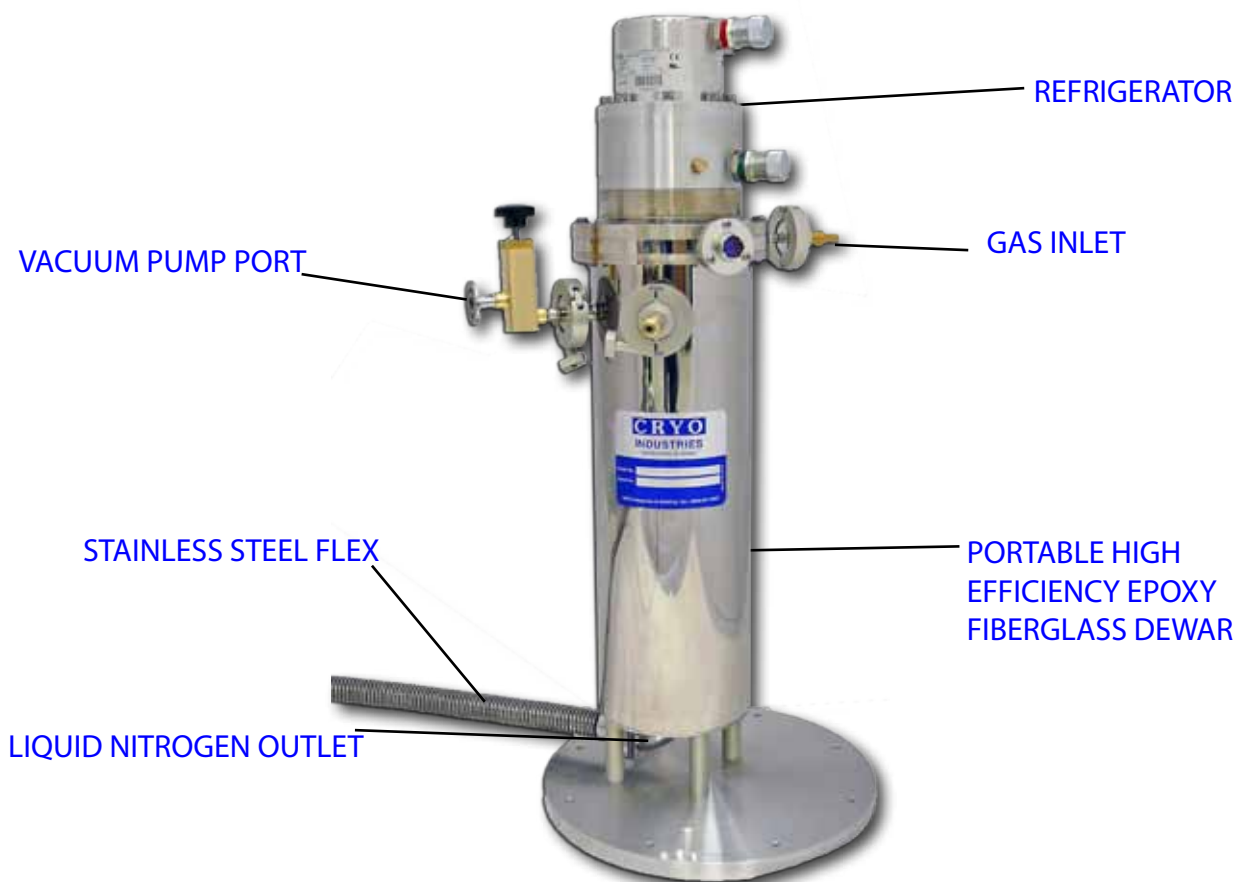
Easy to use, convenience and no permanent attachment to a dewar

Nitrogen gas flows into the inlet port and liquid nitrogen flows out the nozzle. Small footprint design.

Supplied with (1) portable Dewar.

No need to bring your experiment or separate laboratory dewars to the generator.

Gas in - Liquid Nitrogen out



Select: 10, 20 or 32 liters/day

Select: Optional Nitrogen Gas Generator with or without integral air compressor

- Produces liquid nitrogen directly from the air using advanced PSA (Pressure Swing Adsorber) technology (if optional liquid nitrogen generator is purchased) and cryogenic refrigerator
- Operates 24 hours/day automatically
- Cooldown from start approximately 2 hours
- Water cooled compressor standard (air or chiller cooled optional)
- Liquid level monitors installed in dewars, digital continuous readout
- Supplied with a high efficiency, lightweight epoxy fiberglass dewars