

# LIQUID NITROGEN GENERATOR LINE



**LabTech**

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# MAKE YOUR OWN LIQUID NITROGEN

Make your own high-quality liquid nitrogen, anywhere, anytime. On site liquid nitrogen generation is extremely easy. Experience first-hand the convenience of having the generator in your lab without delivery hassles. Never run out of liquid nitrogen.

Vapors released by liquid nitrogen, due to its very low boiling point (-196,79°C) that instantly transforms it into gaseous state in contact with air, attract everyone's curiosity but you must not be tricked as it can be very dangerous if not properly handled.

The technology has huge implications for industrial, medical and laboratory applications, removing the need for liquid nitrogen tanker deliveries, which as well as being inconvenient, drive up costs and create potential problems with evaporation and contamination. The control system used gives operators all the information necessary to ensure an efficient and consistent supply of liquid nitrogen and nitrogen gas are always available.

- » **Extremely Easy to Use**
- » **Built-in Low Noise Air Compressor**
- » **Built-in Oxygen Analyzer with Alarm**
- » **PSA Technology**
- » **Vacuum Prevention System on Dewar**
- » **Built in Dewar tank**
- » **Color Graphic Touch Screen**
- » **Low Noise Level**



## TECHNICAL SPECIFICATIONS

	LNG10	LNG20	LNG40	LNG80
Liquid Nitrogen Volume (L/day)	10	20	40	80
Built in dewar capacity (L)	20	50 (35 optional)	100	210
Air compressor	Included	Included	Included	Included
Control system	Analogical control	HMI color graphic touch screen	HMI color graphic touch screen	HMI color graphic touch screen
Electrical input options	30V 50Hz or 220V 60Hz (1phase)	30V 50Hz or 220V 60Hz (1phase)	30V 50Hz or 220V 60Hz (1phase)	220V,380V,415V 50/60Hz (3phase)
Power consumption (Kw)	3.0 @50Hz	3.0 @50Hz	3.0 @50Hz	7.0 @50Hz 8.4 @60Hz
Max altitude (mt)	Up to 3.000	Up to 3.000	Up to 3.000	Up to 3.000
Ambient temperature range (°C)	+4 to +32	+4 to +32	+4 to +32	+4 to +50
Noise level (dBA)	65 @1mt	65 @1mt	65 @1mt	65 @1mt
Dimensions (LxWxH cm)	60x60x170	80x60x180	120x60x180	160x80x180
Weight (Kg)	120	300	350	450
Water cooled version	Available	Available	Available	Available
Ordering information	LLN10AC	LLN20AC	LLN40AC	LLN80AC

## MAIN APPLICATIONS

- Cells (tumor, white blood, lymphocytes, platelets, bone marrow).
- Cryopreservation of biological samples (e.g. organs, tissues, human and animal semen, fertilized eggs).
- Cryotherapy (e.g. removal of skin abnormalities).
- Bacteria, virus manipulation.
- Superconductivity coolant.
- Cryogenic insulation in oil industry (e.g. to freeze water and oil pipes when a valve is not available to block fluid flow to the work area).
- Industries of different kinds (shrink-welding, CCD cameras, NMR spectrometers and MRI systems, high-field superconducting magnets, spacecraft thermal testing, shielding materials from oxygen exposure, controlled-evaporation or very low temperature reaction processes in chemistry, injecting nitrogen just before sealing or capping bottles or containers, freezing and transport of food products).
- Livestock industries (cattle branding).
- Avant-garde and molecular cuisine or gastronomy (instant freezing, ice cream, liquid nitrogen cocktails “cauldron effect”, food experiments and preparation).
- Cooking schools.

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LabTech is a leading manufacturing company with skill and passion devoted to provide advanced laboratory solutions to the analytical community. We are located in Sorisole, northern Italy, with facilities in USA and China. Incorporated with global branches, LabTech is organized into R&D, production, marketing & sales and customer support. Major LabTech products include organic/inorganic sample preparation systems, laboratory cooling/heating/temperature control equipments, analytical instruments, gas generators, laboratory centrifuges and liquid nitrogen generators. With knowledgeable scientists and experienced engineers, our R&D team has developed and released a series of new lab equipments and instruments dedicated to the modern analytical laboratories. With all of these accomplishments and our endless research and development efforts, we are proud to be your professional partner.



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