

# LN2

# LIQUID NITROGEN GENERATORS

## 'LN480B' - Intelligent LN2 Generators

*With BOOST Technology*

'LN480B' is the latest 'water cooled' Liquid Nitrogen Generator from Noblegen Products.

Utilising the reliable and efficient PSA technique of separating Nitrogen and Oxygen is used to produce high quality Nitrogen Gas which is then liquefied using our powerful cooling system.

The liquid nitrogen is stored within a suitable sized vacuum insulated tank and the product can be dispensed using a 1.5 metre vacuum insulated hose provided. Other options of dispense methods are available on request.



### Features

- Water cooled to ambient temperatures up to +52°C
- Nitrogen produced using our own PSA nitrogen generator.
- LN2 at 99% purity.
- Nitrogen injection system for pre-cooling of gas prior to liquefaction.
- Pressure Boost system increasing production
- No Loss pressure system
- 1,000 Litre LN2 storage dewar
- All cryogenic parts are vacuum insulated.
- Colour touch screen control.
- Small footprint.
- Low noise.



WATER CHILLER

### Options

- Internet connectivity
- SMS text messaging
- Air compressor system
- Closed loop water chiller
- Foot pedal dispensing
- Nitrogen gas outlet

The Noblegen Cryogenics LN480B liquid nitrogen generator is your reliable and efficient on-site plug and produce cryogenic solution. With a small footprint, low power consumption and low cooling water requirement makes the LN480B one of the best solutions available on the market. With cooling water or chiller supplied the system can operate up to +52°C ambient temperatures making it suitable to operate in most parts of the World. Simply connect the power, cooling water and compressed air (integrated air compressor available as an option) and press start for the machine to automatically produce liquid nitrogen when needed. An intelligent level sensor system means you can select the liquid level stop and start using the touch screen controller so you always have enough LN2.

The Pressure 'BOOST' system increases liquid nitrogen production with no additional power or cooling water required, coupled with the 'No Loss' pressure maintaining system making it the most efficient and intelligent GM based technology generator available.

**MADE IN BRITAIN** 

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## Specifications

Liquid nitrogen production (l/hr)	*20.0
Liquid nitrogen purity	>99% (<1.0% O2)
Liquid nitrogen tank volume (litres)	1,000
Liquid nitrogen Pressure (bar g)	Up to 4.0
Power consumption (Kw) – excluding air compressor & chiller	27.6
Power supply (3Ø + neutral and earth)	200-480 50/60Hz
LN2 skid foot print	3m x 2m
LN2 skid height	2.5m
LN2 skid weight	2,500Kg
Noise level	<65 dBA
Compressed air quality	BS1.2.1
Compressed air requirement (Nm <sup>3</sup> /hr) @ 7 bar g min	52 (30CFM)
Cooling water requirement (kw cooling power) @ 10°C	30 = 8Kw electrical

LN2 production rate at +25°C and <2,000 metres altitude and at 50Hz (for 60Hz add 20% production rate). For higher altitudes please consult Noblegen for advice.

\*Increased tank pressure and production when BOOST mode activated

## Optional Air Compressor

Air compressor power consumption (Kw)	7.5
Wet air receiver volume (litres)	250
*Compressed air capacity (Nm <sup>3</sup> /hr) @ 8 bar g	55 (32CFM)

\*Compressed air over-rated to accommodate desiccant air dryer purge



Noblegen recommends Avelair air compressors which are available c/w built in wet air receiver, timed drain, desiccant air dryer and filters to meet the correct specification required to feed the LN480B liquid nitrogen generator.

Fixed and variable speed air compressors available on request.