CRYOGEN.20-RA

SMART & CLEVER Liquid Nitrogen Generator

Reference : CRYOGEN.20-RA

WITH ENERGY SAVING AND BOOST TECHNOLOGY

Description

The CRYOGEN.20-RA is the **"Air cooled"** liquid N2 generator from F-DGSi.
Utilising a reliable 'Cryo-refrigerator' design of cold head technology and helium compressor, the nitrogen gas is then produced using the PSA technology which is cooled to 77K (-196°C) to produce liquid nitrogen.

The Generators are controlled using the latest in HMI touch screen technology to display the process in real-time, showing the liquid level of the dewar, PSA nitrogen production giving a fully automated system at the touch of a button with remote access for diagnostic control.

The liquid nitrogen can be dispensed using a 1.5 meter vacuum insulated hose. The integrated cooling fans can operate with air cooling up to +32°C ambient temperature, making it suitable to operate everywhere in the world.





UNIQUE AND INTELLIGENT OPERATOR INTERFACE WITH REMOTE ACCESS



Applications

IVF (storage of samples) | Cryotherapy | Dermatology | Lab applications | Metal treatment | Animal Husbandry

Benefits & Savings

CryoGen Generation Plants is your reliable and efficient alternative to conventional Liquid Nitrogen supplies. Taking away the on-going costs, safety considerations of deliveries, transportation of traditional liquid gas supplies.

Your on-site Liquid Nitrogen systems will be some of the most advanced and intelligent available.

The control system gives the user all the information necessary to ensure an efficient and consistant supply of Liquid Nitrogen and nitrogen gas are always available. From the process to flow and alarms, including automatic operation, Trend graphs, service alarm and service records page, there is simply no other Liquid Nitrogen System.

Standard Features

- Intelligent color touch screen to provide simple and user friendly management of all functions of the unit
- Fully regenerative PSA technology with oil free air compressor
- Helium Compressor Air cooled, no water chiller required
- Liquid Nitrogen @99% purity
- The enclosure have two front doors that can be locked with a key to prevent access by unauthorized persons.
- LN2 Dewar Liquid Level sensor
- Pressure Boost technologies increasing liquid N2 production
- Vacum prevention system on liquid dewar
- Built in O2 analyser with alarm
- Audible alarm display and Visual maintenance indication with history log
- Automatic operation
- Remote PC monitoring and diagnostic analysis via USB to interface the unit with customer's PC software (allow to carry out checks and maintenance effectively, only via a remote connection)
- Energy Saving Technology (EST):
  - Switch off the air compressor when gas supply is not required
  - Allowing low energy consumption and increasing durability of the air compressor
- Quiet thanks to the Soundproofed compressor box and anti-vibration features
- Wheels for easy installation

MODEL	CRYOGEN.20-RA
GENERALS INFORMATIONS	
Max L/Day	20
Max L/Hour	0.84
Liquid N2 Purity	> 99% (< 1% O2)
Liquid N2 Dewar Capacity (L)	60
Liquid N2 Pressure (bar)	1.5*
Color controller with «touch screen»	Showing more parameters: Compressed air pressure, Nitrogen gas pressure, The pressure in the storage vessel, Liquid level %, Liquid production in l/h, Oxygen Levels %
Temperature range	7 - 25°C (45 - 77°F)
Cryogen Enclosure on wheels (W x H x D)	165 x 196 x 80 cm (65" x 77" x 31")
Cryogen Enclosure weight (kg/lbs)	450 / 992
Electrical supply	460-480 (±10%) VAC - 60 Hz 3 ph + neutral and earth
	380/415 (±10%) VAC - 50 Hz 3 ph + neutral and earth
	200 (±10%) VAC 50/60 Hz 3 ph + neutral and earth
Power consumption (Kw)	4.2
Noise level	< 55 dBA
CONNECTIONS	
Inlet/outlet for Cryogen	G 3/8
COMMUNICATION	
USB/PC Control	In series

Cryogen production rate at + 25°C and < 2000 meters altitude at 50Hz.
*boost mode up to 4 bar. Increase liquid N2 production to 40 L/day

Options



1 | Cryogenic Safety Equipment



2 | Cryogenic Hoses



3 | Additionnal dewars

4 | Internet Connectivity

5 | SMS Text

[F-DGSi Care]

The products are guaranteed 24 months*. Beyond, your investment continues to be supported by our maintenance program **[Gold Service]**. Our wold class technical assistance offers Programmed preventive maintenance to ensure optimal performance of your Gas generator F-DGSi and a priority intervention in case of failure.

***Year 2 of warranty subject to generator being serviced at end of the first year by a F-DGSi-approved agent in accordance with fixed annual maintenance schedule. For full terms and conditions, visit www.f-dgs.com**

Certified Product

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