

TECHNICAL DATA SHEET

LN2-NMR Generation Systems

Features

- Range of Models Available
- Complete NMR Solution
- Compact and Quiet design
- Built in Nitrogen PSA
- Automatic operation
- Energy saving mode
- LN2 Dewar Liquid Level
- N2 Gas Outlet as standard
- Trend graphs into MS excel
- Alarms with help menu
- Remote access via internet

Applications

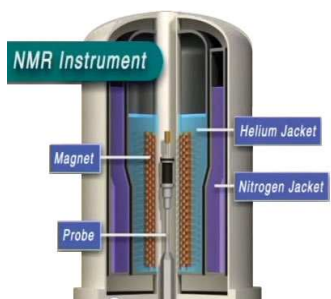
NMR Machines

Options

- Return hose for nitrogen gas recycling
- Dispensing hose lengths to suit installation

LN2-NMR' is the latest liquid nitrogen generation systems designed specially for NMR applications.

Utilising the reliable 'Cryo-refrigerator' design of a cold head and helium compressor, nitrogen gas is produced using the PSA technique which is then cooled to 77K (-196c) to produce liquid nitrogen. The NMR systems have been designed specially designed to easily connect to an NMR for either manual or automatic filling of the liquid nitrogen



NMR internal layout

Models available:-

- LN10 - 10 L/day (0.42 L/hr)
- LN20 - 20 L/day (0.83 L/hr)
- LN40 - 40 L/day (1.70 L/hr)
- LN60 - 60 L/day (2.5 L/hr)
- LN120 - 120 L/day (5.0 L/hr)

Overview:-

LN2-NMR Liquid Nitrogen Generation Systems from NobleGen Products is your reliable and efficient alternative to conventional liquid nitrogen supplies used for NMR applications. Taking away the on-going costs, safety considerations of deliveries, transportation and filling of the NMR with traditional liquid gas supplies, the 'LN2-NMR' on-site Liquid Nitrogen systems are some of the most advanced and intelligent available. The control system gives the user all the information necessary to ensure an efficient and consistent 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 quite like NMR-LN2.

Features:-

- Quiet and low vibration design for NMR applications
- Internal liquid nitrogen storage dewar for first NMR fill
- Outlet solenoid valve for manual or automatic running
- Push button dispensing from touch screen
- Communicate with NMR liquid level sensor for automatic top-up
- Screen shows Liquid Nitrogen and Liquid helium Level
- Optional return hose to recycle vented off nitrogen gas back into cryo-cooler

NMR-LN2 - A SAFER AND MORE EFFICIENT WAY TO FILL YOUR NMR

NOBLEGEN PRODUCTS

WIRAC AUTOMATION LTD

5 PARKER COURT

GATESHEAD

TYNE & WEAR ,

NE11 9EW

UNITED KINGDOM

T: +44(0)191 460 1177

F: +44(0)191 460 1079

E: sales@nobleGen.co.uk

W: www.nobleGen.co.uk



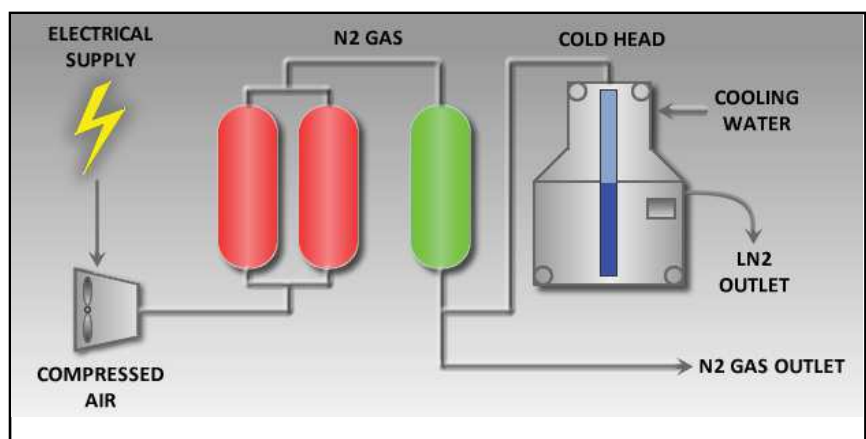
NobleGen is a Wirac Automation Product

TECHNICAL DATA SHEET

NMR-LN2 Generation Systems

Technical Specification							
Models	L/Day	L/Hr	Dewar Capacity (L)	N2 Gas (l/min)	Electrical Supply	Power (Kw)	Cooling Water (L/min @ 27°C)
LN10	10	0.42	35	5.5	230v	2.2	2.8
LN20	20	0.83	100	11.0	230v	4.0	4.5
LN40	40	1.70	160	13.0	415v	5.5	6.0
LN60	60	2.50	210	33.0	415v	7.5	7.6
LN120	120	5.0	300	65.0	415v	15.5	11.4

Specification based on ambient temperature range of 7°-38°C (45°-100°F) and maximum altitude of 3,000 m (10,000 ft). For any other conditions please contact NobleGen technical department.



System Schematic Diagram

Dimensions & Weights				
Models	Height mm	Width mm	Depth mm	Weight Kg
LN10	1600	1200	600	150
LN20	1600	1200	600	200
LN40	1600	1600	800	300
LN60	1600	1600	800	350
LN120	1600	2000	1800	450



Features

- Range of Models Available
- Complete NMR Solution
- Compact and Quiet design
- Built in Nitrogen PSA
- Automatic operation
- Energy saving mode
- LN2 Dewar Liquid Level
- N2 Gas Outlet as standard
- Trend graphs into MS excel
- Alarms with help menu
- Remote access via internet

Applications

- NMR Machines

Options

- Return hose for nitrogen gas recycling
- Dispensing hose lengths to suit installation

NOBLEGEN PRODUCTS

WIRAC AUTOMATION LTD
 5 PARKER COURT
 GATESHEAD
 TYNE & WEAR,
 NE11 9EW
 UNITED KINGDOM

T: +44(0)191 460 1177

F: +44(0)191 460 1079

E: sales@nobleGen.co.uk

W: www.nobleGen.co.uk



NobleGen is a Wirac Automation Product