

LDH

Small integrated liquid nitrogen machine

LDH small liquid nitrogen machine is a plug-in liquid nitrogen solution. Using the mixed refrigerant refrigeration mrjt process, based on the regenerative multi-component mixed refrigerant throttling refrigeration cycle, from the ambient temperature to the target refrigeration temperature, select the high, medium and low boiling point pure substance components to form the multi-component mixed refrigerant, so as to realize the relay matching of the effective refrigeration temperature range of each boiling point component. It is a refrigerator that can efficiently achieve the temperature range of -40~-196 °C.



● Liquefier interface of small integrated machine



Working Principle

The compressed air passes through the oil-free air compressor, enters the PSA nitrogen generator after cold dry absorption and filtration, and generates sterile nitrogen with a dew point of -60 °C after passing through the sterilization filter. Sterile nitrogen is liquefied into liquid nitrogen after entering the refrigerator.

Product Features

- Liquid nitrogen output: 10L-120L per day
- Regular start and stop: you can freely set the daily startup and shutdown time
- Liquid level start and stop: if equipped with liquid nitrogen tank with liquid level gauge, the start and stop can be controlled according to the liquid level, and the liquid level is displayed
- Remote monitoring: MCGS remote monitoring, remote downloading of historical operation records, online program upgrading, convenient for remote maintenance
- Fully enclosed box type compact design
- Liquid nitrogen dewar bottle (optional)

Parameter selection

MODEL	LPLN-10	LPLN-20	LPLN-40	LPLN-80	LPLN-120
Style	Integrated Machine				
Capacity	0.3-0.4L/H 8-10L/day	0.8-1L/H 20-24L/day	1.6-2L/H 40-50L/day	3L/H 72L/day	5L/H 120L/day
Purity	≥99%				
Voltage Frequency	220V(AC)			380V(AC) 3P 50Hz	
Power (KW)	2	4.5	7.5	12.5	15
Area covered (m ²)	1	1.5	3	3.5	3.5
Equipment size (mm)	750*850*1700	1150*850*2000	1250*2000*2000	1600*2000*2000	1600*1100*2000
Required room area (m ²)	>5	>6	>10	>15	>15
Ambient temperature requirements	0-30°C Good Ventilation				
One meter noise (dB)	<60dB	<60dB	<60dB	<60dB	<60dB
Cooling mode	Air Cooling				
Nitrogen quantity (m ³ /h)	1	2	4	6	8
Nitrogen dew point (°C)	-60°C				
Nitrogen pressure (Mpa)	0.8				
Supporting suggestions (L)	15	50	100	150	250
Other	If the non-standard voltage frequency, altitude > 1000m, purity ≥ 99.9, it needs to be customized				