New Generation Liquid Nitrogen Plants

CNP180 – Compact, Economic and Elegant

CNP180 arrives as a plug-and-liquify system with external compressor and chiller to lower the noise in the plant room. A fully integrated design and one button operation allows you to place CNP series liquifiers in the research labs or clean rooms. Its modular design takes a little space and allows you to extend your liquification capacity. Simply make the electrical connections and produce your own liquid nitrogen by a fully automated operation with a user friendly interface of its PLC controller. Operator only needs to replace the filters and perform routine checks between maintenance intervals of 13000 operating hours.

Production Rate	≥ 180 liter/day (≥192 l/day @23°C)
Electrical Rating	380/400/415VAC, 3Ph, 50Hz, 480VAC, 3 Ph, 60 Hz
Power Consumption (Steady State)	21kW @ 50Hz 24kW @ 60Hz
Dimensions	1245 mm (W) x 2600 mm (L) x 1388 mm (H)
Weight	1000 kg (Empty) / 1300 kg (Full)
Suggested Installation Area	6m (W) x 3m (L) x 3m (H)
Compressed Air Requirement	~22,5 m^3/hour@7 bar
Cooling Water Flow Rate	27 liters/min @ 4 bar
Cryocooler	GM type cryocooler mounted on Dewar
Compressor	He, 99.995% purity @ 15-16.7bar (220-245psig)
Human Machine Interface	8" Color Graphic Touch Screen
Dewar Volume	360 liters, (500/1000 lt optional)
Operating Pressure	2.0 bar
Dewar Level Control	Capacitive level sensor
Features	Easy installation, fully automatic start and stop operation by PLC which supports efficient troubleshooting, the monitor displays the operational status of the plant and the failures triggered by safety devices and sensors, single switch operation, control all components through the diagnostic screen, LN_2 transfer by one button, Automatic re-start after power failure.
<u>Built-in Nitrogen Generator</u>	
Purity	≥ 99%
Dew Point	up to -40°C
Flow Rate	≥ 5.3 m^3/hour
Ambient Temperature Range	+5°C to +50°C
Maximum Altitude	3 000 meters
Noise Level	< 65 dB @ 1 meter
Standards	CE Conformance, ISO 12100:2010, IEC60204-1, 2006/42/EC, 97/23/EC; ISO9001:2015