

# New Generation Liquid Nitrogen Plants

## CNP120 – Compact, Economic and Elegant

CNP120 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 10000 operating hours.



Production Rate	≥ 120 liter/day (5 litres/hour); 31.8 gal/day (1.32 gal/hour)
Electrical Rating	380/400/415VAC, 3Ph, 50Hz or 480VAC, 3 Ph, 60 Hz
Power Consumption (Steady State)	14kW @ 50Hz / 16kW @ 60Hz
Dimensions	1245 mm (W) x 1824 mm (L) x 1388 mm (H)
Weight	800 kg (Empty) / 1000 kg (Full)
Suggested Installation Area	3.5m (L) x 5m (W) x 4m (H)
Compressed Air Requirement	≥ 14 m <sup>3</sup> /hour @10 bar (147 psig)
Cooling Water Flow Rate	18 liters/min (2.4 gal/min) @ max. 8 bar (116 psig), 25 °C
Cryocooler	GM type cryocooler mounted on Dewar
Compressor	He, 99.999% purity @ 15-15.3bar (220-225psig)
Human Machine Interface	8" Color Graphic Touch Screen
Dewar Volume	240 liters (32 gallons), 400liter (optional)
Operating Pressure	1.5 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 <sub>2</sub> transfer by one button, Automatic re-start after power failure.
<b><u>Built-in Nitrogen Generator</u></b>	
Purity	≥ 99%
Dew Point	up to -70°C (-94°F)
Flow Rate	4 m <sup>3</sup> /hour
Ambient Temperature Range	+5°C to +40°C
Maximum Altitude	3 000 meters (10 000 feet)
Noise Level	Low noise level < 60 dB @ 1 meter
Standards	CE Conformance, ISO 12100:2010, IEC60204-1, 2006/42/EC, 97/23/EC; ISO9001:2015