

# New Generation Liquid Nitrogen Plants

## CNP40 – Compact, Economic and Elegant

CNP40 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 liquefiers 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 6500 operating hours.



Production Rate	≥40 liter/day (2.5 liters/hour)
Electrical Options	200/220/230/240VAC, 50 Hz 208/230VAC, 60 Hz
Power Consumption (Steady State)	7.5kW @50Hz / 8kW @60Hz
Dimensions	830 mm (W) x 1495 mm (L) x 1388 mm (H)
Weight	350 kg (Empty) / 450 kg (Full)
Built-in Air Compressor	Oil-free air compressor, ≥ 4 m <sup>3</sup> /hour @7 bar (102 psig)
Cryocooler	GM type cryocooler mounted on Dewar
Compressor	He, 99.995% purity @ 19-19.3bar (275-280psig), Air Cooled
Human Machine Interface	8" Color Graphic Touch Screen
Dewar Volume	160 liter
Operating Pressure	1.7 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. O <sub>2</sub> sensor with audible alarm.
<b><u>Built-in Nitrogen Generator</u></b>	
Purity	≥ 99%
Dew Point	up to -40°C
Flow Rate	≥0.5 m <sup>3</sup> /hour
Ambient Temperature Range	+4°C to +40°C
Maximum Altitude	3 000 meters
Noise Level	< 65 dB @ 1 meter
Standards	CE Conformance – ISO 12100:2010, IEC 60204-1, 2006/42/EC, 97/23/EC; ISO 9001:2015

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