

New Generation Liquid Nitrogen Plants

CNP180 – Compact, Economic and Elegant

CNP180 arrives as a plug-and-liquefy 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 liquefaction 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.



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| 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 (W x L x H) | 1245 mm x 2600 mm x 1388 mm |
| Weight | 1000 kg (Empty) / 1300 kg (Full) |
| Suggested Installation Area (W x L x H) | 6m x 3m x 3m |
| 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. |

Built-in Nitrogen Generator

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| 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 |