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Product Name : Laboratory Vacuum Drying Oven	**Product Code :** LBNY-0001-800018

Description :

Laboratory Vacuum Drying Oven

Technical Specification :

Instrumentused for drying of heat- sensitive, easily decomposed and easily oxidized substances.
Vacuum ovens show with short heating up times,
High precision temperature control and turbo drying.
Heating and oxygen sensible materials are treated with incomparable care.
Digital pressure control and with controllable pump for installation in a lower chamber, the pump module, installed on the outside of the vacuum oven.
Material and Construction
Interior
Interior: Stainless steel interior, material (316 L), hermetically welded, with removable mountings at the sides for cleaning, including thermo shelf guide bars, as well as mounting on top to avoid turbulences
Shelf: Removable thermo shelf with direct heating system and sensor made of hard and wear- resistant aluminum alloy coated with plasma electrolytic oxidation (Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate).
Volume: 49/1.7 L/cu. Ft
Width: 385/15.2 mm/in
Height: 385/15.2 mm/in
Depth: 330/13.0 mm/in
Number of thermo shelves: 4 to 6
Distance between thermo shelves: 120 to 150 mm/4.7 to 5.9in

Load per shelf: 15 to 25kg/33 to 55lbs
Load per oven: 50 to 70kg/110 to 154lbs
Exterior
Housing: Textured stainless steel, rear zinc- plated steel, with 122cm/4feet, mains cable and plug, safety glass door with inner bullet-proof glass and external anti-splinter screen, aesthetic functional glass- stainless steel operating panel with multifunction display and input module
Width: 500 to 600mm /19.7 to 23.6 in
Height: 650 to 750mm /25.5 to 29.5in
Depth: 450 to 500/17.7 to 19.7in (without door handle, depth of handle 30 to 50 mm/1.2 to 2.0 in
Interfaces: for USB, printer and LAN
Door
Safety glass door: Textured stainless steel frame with spring-loaded safety glass on inside and anti- splinter screen ESG on outside of door
Door seal : Endless silicone profile seal
Monitor
Microprocessor temperature monitor acting as over temperature protection (protection class 3.1) with Pt100, incorporating fault diagnostics with visual and acoustic alarm
Digital over- and under temperature monitor
Temperature monitoring band automatically linked to the set point (ASF)
Multi-Level-Over temperature-Protection (MLOP) for each thermo shelf
Relay for reliable heating cut-off in case of fault
Mechanical temperature limiter (TB)
Acoustic alarm: Over- and under temperature
Temperature
Controller: Electronic microprocessor temperature controller with Pt100 and auto-diagnostic system
Temperature sensor: Pt100 Class A in 4-wire circuit individually for each thermo shelf
Working-temperature range: at least 5/9.0 °C/°F above ambient temperature to +200/392°C/°F
Setting temperature range: (+20 to +200/68 to 392°C/°F)
Temperature variation in time (aluminum thermo shelf): ? ± 0.3°C /0.5°F
Temperature uniformity (surface) at +160 °C (320 °F)/20 mbar (aluminum thermo shelf): ? ± 2/3.6°C/°F
Pressure (vacuum)
Digital electronic pressure control (in program operation up to 40 ramps, adjustable for each segment) for vacuum via solenoid valves.
Tubing for vacuum, air and inert gas are made of material 1.4571.
Adjustable from 5 mbar up to 1100 mbar. Programmable, digitally controlled inlet for air. Integrated process control with programmable temperature and vacuum cycles enabling amongst others accelerated moisture reduction
Rapid air intake for door opening without alteration of selected vacuum set point
Permitted final vacuum: 0.01 mbar
Leakage rate: 0.01 bar/h
Timer functions
Real-time/weekly programmer with group function (e.g. Monday – Friday)
Timer with residual running time: max. 40 ramps (each 1 min. up to 999 h) programmable through controller or Memory Card XL; programming via PC and free-of-charge software: unlimited number of ramps.
Internal log memory
Internal log memory 1024 kB as ring memory for all set points, actual values, errors, settings with real- time and date; capacity up to 3 months at 1 min. intervals
Standard Software control and documentation of temperature and pressure
Setup
Calibration (no sep. PC required), temperature and pressure: 3-point calibration on controller
Setting of language for dialogue and display in English
Connections
Vacuum connection with small flange DN16, and gas inlet with small flange DN 16.

Inert gas inlet:
Programmable and digitally controlled inlet for inert gas with flow rate reduction
Fine-tuning stainless steel 304 needle valve with graduation for accurate and repeatable inert gas backfill or chamber pressure control.
Vacuum Pump Module: Noise-insulated vacuum pump, with built-in pump
Vacuum Pump: Chemically resistant vacuum pump with PTFE double diaphragm, pump capacity at atm. pressures: 60 Nl./min = 3,6 m³/h (127.1 cu. ft./h) and automatic purge control from vacuum oven.
Sub-frame tubular steel, black enameled (for stacking unit consisting of vacuum oven and pump module, total height: 1500 to 1800mm." "The configuration
One Oven with removable thermo shelf and drip-tray, one noise-insulated vacuum pump Module with 1 Vacuum pump, Inert gas inlet and USB and printer interface.
Accessories
Vacuum connecting hose, 3 m (9.8 ft), from oven to pump
Sub-frame tubular steel, black enameled (for stacking unit consisting of vacuum oven and pump module, total height: 1500 to 1700mm (59 to 67 in)
Removable bottom drip tray – stainless steel material
Ambient operating temperature 4–55 °C (39–131 °F)
Humidity Electrical 220 ±10 ACV, 50 Hz

Laboratory Instrument India