

Technical Features

Net Storage Volume	506 lt (17,87 cu ft)
2" Cryoboxes Max Capacity	320
1,5/2ml Vials Max Capacity	32.000
Racks Max Capacity	20
Temperature Setting Range	-40°C/-90°C
Temperature Control Range	-40°C/-86°C
Factory T Set Point	-80°C
Ambient Operating Temperature	+10°C/+35°C, 50% RH (N-ST Climate Class)
Noise Level	< 52 dBA

Power Supply	230V ±10% / 50Hz
Standard Electrical Plug	Industrial plug CEE 16A, 2P+E
Max Power Absorption	6A
Daily Energy Consumption*	11,20 kWh/24h



External Dimensions**	W 969 x D 955 x H 1859 mm W 38,19 x D 37,70 x H 74,40 inch.
Internal Dimensions	W 702 x D 650 x H 1110 mm W 27,64 x D 25,59 x H 43,70 inch.
Weight	300 kg

Packing Dimensions	Carton Box + Pallet: W 1200 x D 1200 x H 2100 mm, 310 kg Wooden Crate: W 1300 x D 1300 x H 2100 mm, 400 kg
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External Surface	Anti-corrosion hot-dip galvanized steel sheet, covered with PVC film
Internal Surface	AISI 304 18/10 stainless steel
External/Internal Edges	Rounded to facilitate cleaning
Insulation Type	High-density CFC-free PUR foam
Insulation Thickness	140 mm on sides / 140 mm rear / 110 mm outer door
Door Type	Solid, with n°3 heavy-duty side hinges for the max stability
Door Sealing	Triple-layer silicone gasket, heated by the refrigerant to avoid the formation of ice
Handle	Ergonomic with integrated key-lock system (n°2 keys included)

Standard Configuration	n°3 shelves in stainless steel (AISI 304), adjustable in height (adjustment steps of 1.5 cm) with max load of 55kg each n°4 insulated inner doors (inner chamber divided into 4 compartments); inner doors can be removed for cleaning n°4 swivel castors, each one equipped with a leveling foot for a total ground stabilization Porthole (Ø 25 mm) for introducing in the chamber independent probes connected to external monitoring system/BMS External vacuum relief valve (automatic & manual pressure release); the valve can be removed for cleaning operations Back-up battery with self-charging circuit to ensure recording of T and alarm data in case of power failure (48 h autonomy) Volt-free contact for connection to an external alarm monitoring system and BMS
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Cooling System

Cooling	Static cooling, with 2-stage cascade refrigeration system; air-cooled condenser with filterless design
Compressor	n°2 hermetic compressors (with thermal protector)
HC Refrigerant (CFC/HCFC free)	1st stage: R1270 (gr. 150) 2nd stage: R170 (gr. 100)
Defrost System	Manual

PL ADV Control System

Controller	Microprocessor Controller
Display	LED display with 5-keys capacitive keyboard, with 0.1°C resolution
Temperature Probes	n°2 NTC probes (for evaporator / temperature control) + n°1 Pt1000 (for monitoring)
Access Control	3-levels password security system (User/Service/Admin)
Connectivity	In-built Wi-Fi module for remote connection to mobile APP ConneX (for IOS & Android)/Cloud The main screen displays the temperature set point, functional icons, current time, alarm events Data logger function with automatic recording of temperature data (at 30-seconds intervals) and events Flash memory capable of recording data for a minimum period of 1 year In-built power stabilizer with linear voltage regulation (± 20V)
Features	Possibility of remotely setting and modifying the device parameters and to view the temperature graph in real time Possibility to download data in CSV/PDF format via APP on smartphone/tablet/PC (no need for USB) Automatic sending of push notifications (via APP) and/or email (via Cloud) in the event of an alarm Possibility of setting automatic sending of weekly temperature and event reports via email
Remote Management and Monitoring with IOS/Android ConneX APP and/or KW Cloud	
Main Alarms List (Audio/visual notification)	<ul style="list-style-type: none"> - Power failure - Door open (interval can be freely set by the user) - High/Low T (limits can be set freely by the user) - Temperature probes failure - Back-up battery failure / low charge - Dirty condenser / High ambient temperature





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Accessories Available On Request

Frontal/Lateral extraction racks made in AISI 304 stainless steel for cryoboxes storage

Additional stainless steel (AISI 304) shelf

Additional internal/external porthole (Ø 25 mm)

Voltage stabilizer

Weekly cycle chart disk recorder (including n°52 spare paper disks + n°1 pen)

CO2 backup system with 12VDC (complete with independent thermal sensor/T controller, 24Ah battery) for activation in case of mechanical/power failure

LN2 backup system with 12VDC (complete with independent thermal sensor/T controller, 24Ah battery) for activation in case of mechanical/power failure

Electrical plug different from standard

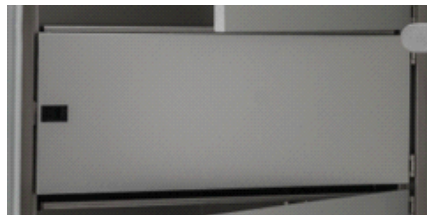
Packing in wooden crate



Ergonomic handle with key-lock system



Shelves adjustment system



Insulated inner door



Heated triple-layer silicone gasket



PL ADV controller



Remote alarm contacts



Vacuum relief valve



CO2/LN2 back-up systems



Frontal extraction racks



Lateral extraction racks

* with +20°C ambient temperature

** Exterior dimensions of main cabinet only, excluding handle and other external projections. For complete details, see the dimensional drawings below



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Dimensional Diagram

