

Freezers - Ultrafreezers  
Platilab & Irilab Series



- **PLATILAB**: top security and performances with reliable temperature control.
- **IRILAB**: combining the high reliability of **PLATILAB** with the possibility to store up to 60.000 vials in less than one square meter thanks to V.I.P. insulation.

Platilab - Irilab Series /Optional

- Temperature chart recorder.
- Shelf.
- Drawer.
- Divider.
- 23-50 mm port hole.
- Bioguard® Acces.
- PT 100 probe.
- Back-up system (CO2-LN2).
- Racks, boxes and dividers.
- Remote cooling system.
- Serial interface.
- Software.



- **Chest and up-right freezers at -40°C / -86°C** for freezing and long term storage of biological samples.
- **Low energy consumption.**
- **V.I.P. Technology for footprint optimization (IriLab models).**
- **Microprocessor control board with seven independent sections for top reliability in case of failures (NEXT models).**
- **Alarm logs in text and graphs.**
- **Data export on SD memory card.**
- **Access control.**
- **Double door models with two independent chambers (NEXT DD models).**



- PRO** → Professional line.
- 86** → Models **H** and **V** - Working temperature: -86°C.
- 40** → Models **SH** and **SV** - Working temperature: -40°C.

### Technical features

**Structure** /Fully metallic in heavy-gauge phosphate-coated, powder-painted steel plate with interior in top quality stainless steel AISI 304.

Both up-right and chest models are installed on castors and adjustable feet.

**Door** /**PLATILAB STD** models equipped with mechanical lock and key;

**IRILAB STD** models equipped with magnetic lock and key.

In **PLUS** version the door is equipped with patented transponder system **BIOGUARD®**, which enables the door opening by a card to authorized personnel only.

The system guarantees a complete access control. In case of power outage, the buffer battery maintains the system on for 24 hours.

Heated pressure compensation valve allows an easy and quick opening of the door.

**Port hole** /Diameter 23 mm, with rubber cap for the insertion of additional probes.

**Inner doors (only for up-right models)** /

**PLATILAB** models: antishock polystyrene panels with magnetic lock and special gaskets.

**IRILAB** models: composite materials (aluminum - pvc - aluminum) panels and magnetic stop.

**Shelves (only for up-right models)** / Stainless steel adjustable in height.

**Insulation** /

**PLATILAB** models: thickness 140 mm. High pressure (40 kg/mc) polyurethane foam.

**IRILAB** models: thickness 70 mm. Vacuum Insulated Panels (V.I.P.) and polyurethane foam.

**Cooling system** /Hermetically sealed, two stages (Cascade cycle) compressor (-86°C) and single stage compressor (-40°C). Refrigerant HCFC-free.

**Adjustment and control system** /**PLATILAB** e **IRILAB** models: microprocessor controller E2003, with two independent sections, the first one to set and control temperature, the second one to manage the alarm system and display temperature.

Rechargeable buffer battery (12 V, 2Ah) to maintain the alarm system on for 48 hours in case of power outage. Configured for a remote replication of alarms.

01 02 03



## Next™ models

**Next** models add to Platilab - Irlab freezers enhanced display and data logging features by means of **Cold Brain™**, the superior microprocessor controller with seven independent sections.

Microprocessor controller **Cold Brain™**, with seven independent sections to maintain the proper working conditions even in presence of failures.

The multiple high quality sensors (four PT100 and four NTC) and the efficient and flexible alarm system guarantee the maximum security in sample control.

### Cold Brain™ key features

- **Multi language** compliant to European rules.
- **Wide graphic display** (240x128pixel), with regulation and alarm sections.
- **Touch keyboard** using 8 soft keys with context dependent functions.
- **On-Screen System Messaging**: displays set-points, details of alarms, door openings and operating conditions.
- **Integrated Data Recorder**: traditional paper chart recorder is replaced by electronic recorder. Data (alarms and parameters) are stored for 3 months at a sample interval of 1 min.
- **Acoustic and Visual Alarms** for high and low temperature conditions, power failure, low battery, malfunctions and filter cleaning.
- **Alarm Log** provided via text and graphs, to record door openings, power failure, electronic fault, internal probe and ambient temperature probe failures, fan and condenser malfunctions.
- **Back up battery** (up to 48 hours): maintains settings and activates visual and acoustic alarms during power outage.
- **Battery charge indicator**.
- **Prearranged for CO2 & LN2 Backup Systems**: simplifies and makes cheaper the installation.
- **Remote Alarm Contacts** provides connection to centralized monitoring systems.
- **Secure Digital (SD) card** to download data on PC.
- **Ethernet Interface** (Optional Wireless) to connect to a laboratory pC network. Through **Cryolog2** software, it is possible to monitor parameters and alarms of multiple freezers (up to 30).
- **Protected On-Off Switch** to prevent accidental shut off.
- **Low noise**.

04	05
----	----

01. E2003 with Bioguard®.
02. Irlab 800 with 4 inner doors.
03. Platilab 500 with 3 inner doors and racks.
04. Irlab NEXT 800.
05. COLD BRAIN™ detail.





## Double door Freezers: Next™ DD Models

**Independent chambers** /Two separated chambers, accessible through independent doors.

**Structure** /Heavy-gauge phosphate-coated, powder-painted steel plate with interior in top quality stainless steel AISI 304. Installed on castors and adjustable feet, for easy movement. All our freezers fit with standard doors.

**Port hole** /Diameter 23 mm, with rubber cap for the insertion of additional probes.

**Door** /STD models: equipped with magnetic lock and key.

The **PLUS** version door is equipped with patented transponder system **BIOGUARD®**, which enables the door opening by a card to authorized personnel only. The system guarantees a complete access control.

In case of power outage, the buffer battery maintains the system on for 24 hours.

Heated pressure compensation valve allows an easy and quick opening of the door.

**Inner doors** /Panels in composite material (aluminum–pvc–aluminum) and magnetic stop.

**Shelves (only for up-right models)** /Stainless steel adjustable height.

**Insulation** /Thickness 70 mm. Vacuum Insulated Panels (V.I.P.) and polyurethane foam.

**Cooling system** /Double stage hermetic system. HCFC-free refrigerant. **Adjustment and control system** /Microprocessor controller **Cold Brain™**, with seven independent sections to maintain the proper working conditions even in presence of failures. The multiple high quality sensors (four PT100 and four 4 NTC) the efficient and flexible alarm system guarantee the maximum security in sample control.

### Cold Brain™ key features

- **Multi language** compliant to European rules.
- **Wide graphic display** (240 x128 pixel), with regulation and alarm sections.
- **Touch keyboard** using 8 soft keys with context dependent functions.
- **On-Screen System Messaging**: displays set-points, details of alarms, door openings and operating conditions.
- **Integrated Data Recorder**: traditional paper chart recorder is replaced by electronic recorder. Data (alarms and parameters) are stored for 3 months at a sample interval of 1 min.
- **Acoustic and Visual Alarms** for high and low temperature conditions, power failure, low battery, malfunctions and filter cleaning.
- **Alarm Log** in text and graphs, to check door openings, power failure, electronic fault, internal probe and ambient temperature probe failures, fan and condenser malfunctions.
- **Backup battery** (up to 48 hours): maintains settings and activates visual and acoustic alarms during power outage.
- **Battery charge indicator**.
- **Prearranged for CO2 & LN2 Backup Systems**: simplifies and makes cheaper the installation.
- **Remote Alarm Contacts** provide connection to centralized monitoring systems.
- **Secure Digital (SD) card** to download data on PC.
- **Ethernet interface** (Optional wireless) to connect to a laboratory PC network. Through **Cryolog2** software, it is possible to monitor parameters and alarms of multiple freezers (up to 30).
- **Protected On-Off Switch** to prevent accidental shut off.
- **Low noise**.

06	07
----	----

06. Irilab NEXT 520 DD.  
07. Irilab NEXT 520 DD with doors opened.



# Technical specifications

	Horizontal Models					
Model	PLATILAB 110		PLATILAB 370		PLATILAB 550	
	SH	H	SH	H	SH	H
Nominal capacity (l)	110		370		550	
Temperature range (°C)	-20 / -45	-40 / -86	-20 / -45	-40 / -86	-20 / -45	-40 / -86
Supply voltage (V)*	230 V / 50 Hz - 115 V / 60 Hz - 230 V / 60 Hz					
Refrigerant	R404	mixed refrigerant	R404	mixed refrigerant	R404	mixed refrigerant
External dimensions (mm)	730 × 850 × 1080		1780 × 855 × 1140		2350 × 855 × 1140	
Internal dimensions (mm)	450 × 560 × 450		1050 × 520 × 670		1590 × 520 × 670	
Max Boxes capacity (n°)	63		210		330	
Overall weight with standard packaging (Kg)	175	205	274	299	324	360
Noise level (dba)	52					

	Vertical Models					
Model	PLATILAB 340		PLATILAB 500		IRILAB 800	
	SV	V	SV	V	SV	V
Nominal capacity (l)	340		500		800	
Temperature range (°C)	-20 / -45	-40 / -86	-20 / -45	-40 / -86	-20 / -45	-40 / -86
Supply voltage (V)*	230 V / 50 Hz - 115 V / 60 Hz - 230 V / 60 Hz					
Refrigerant	R404	mixed refrigerant	R404	mixed refrigerant	R404	mixed refrigerant
External dimensions (mm)	765 × 900 × 1985		1015 × 900 × 1985		1086 × 890 × 1995	
Internal dimensions (mm)	450 × 530 × 1350		700 × 530 × 1350		906 × 609 × 1472	
Max Boxes capacity (n°)	255		420		600	
Overall weight with standard packaging (Kg)	243	260	293	330	360	390
Noise level (dba)	<52		<52		<53	

	Horizontal Models			Vertical Models	
Model	PLATILAB Next 370		PLATILAB Next 550	PLATILAB Next 340	PLATILAB Next 500
Nominal capacity (l)	370		550	340	500
Temperature range (°C)	340				
Supply voltage (V)*	230 V / 50 Hz - 115 V / 60 Hz - 230 V / 60 Hz				
Refrigerant	mixed refrigerant				
External dimensions (mm)	1780 × 855 × 1140		2350 × 855 × 1140	765 × 900 × 1985	1015 × 900 × 1985
Internal dimensions (mm)	1050 × 520 × 670		1590 × 520 × 670	450 × 530 × 1350	700 × 530 × 1350
Max Boxes capacity (n°)	210		330	252	420
Overall weight with standard packaging (Kg)	299		360	260	330
Noise level (dba)	52				

	Vertical Models			
Model	IRILAB Next 520		IRILAB Next 800	
	V	V - DD	V	V - DD
Nominal capacity (l)	520		800	
Temperature range (°C)	-40 /-86			
Supply voltage (V)*	230 V /50 Hz - 115 V /60 Hz - 230 V /60 Hz			
Refrigerant	mixed refrigerant			
External dimensions (mm)	730×854×1980		1086×890×1995	
Internal dimensions (mm)	586×613×1470		906×609×1472	
Max Boxes capacity (n°)	384	288	600 / 432	
Overall weight with standard packaging (Kg)	260	274	390	407
Noise level (dbA)	53			

- Illustration, description and technical data may be changed without notice.
- -40°C and -86°C freezers certified according to 93/42/ECC directive are also available (please refer to **Blood Bank Refrigerators and Freezers** catalogue).
- (\*) 230V/60Hz and 115V/60Hz models are also available.



ANGELANTONI  
GROUP  
MORE THAN  
YOU THINK

---

**Angelantoni Life Science S.r.l.**

Località Cimacolle, 464 - 06056 Massa Martana (PG) Italy  
ph. (+39) 075.89551 (a.r.) - fax (+39) 075.8955312  
biomedical@angelantoni.it

**[www.angelantonilifescience.it](http://www.angelantonilifescience.it)**

---

