



**Pinnacle**  
SCIENTIFIC AND MEDICAL EQUIPMENT

# Pinnacle's -86°C Ultra Low Temperature (ULT) Upright Freezer



Pinnacle Scientific's Ultra Low Temperature Freezers are proudly designed in Australia. Some of the key features include a 10 inch touch screen giving the user a seamless experience including exporting temperature data via USB. Pinnacle Scientific's Dual Guard technology has been designed to offer the highest levels of performance and reliability while maintaining low energy consumption. Pairing Pinnacle Scientific's Dual Guard technology with superior VIP insulation and an advanced temperature control system gives the user peace of mind that stored products are kept at the optimal temperature.

Designed to maintain temperatures as low as -86°C ensures optimal preservation of delicate biological specimens, including enzymes, viruses, cells, and tissues.

The Pinnacle Ultra Low Freezer is the ideal choice for laboratories, research facilities and all cold chain applications.

## **FEATURES:**

- Superior insulation for maximum energy efficiency
- Advanced cooling system for fast temperature recovery after door opening
- Lockable door for secure storage
- Easy-to-use touchscreen interface for temperature monitoring and control
- Remote monitoring and alarm system for added peace of mind.
- Robust and durable construction for long-term use and minimal maintenance.



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# Refrigeration - Your size, your way



## Energy Saving Refrigeration

Dual Guard auto cascade technology. When one system operates alone, samples can still be safely stored below  $-80$ , offering faster freezer chamber time. Hydrocarbon refrigerants ensure energy savings and long-term sample security.



## Pressure Equalisation Port

Heated Pressure Equalization Port allows users to re-open the main door quickly when entering.



## USB Interface

Enables users to download historical temperature data for compliance/auditing purposes.

10 Inch touch screen makes operation more user friendly and convenient.



## Multi-layer Sealing Structure

Triple gaskets provide a tight seal between the inner doors and outer door, reducing heat gain and retaining the temperature better in the event of a power failure.



## Improved Handle Design

Lockable handle safeguards your precious samples. A padlock can also be added for extra sample safety.



## Multi-level Alarms

Alarm functions include high, low temperature, sensor error, power failure, high ambient, clean filter and door ajar.



**Featuring world-leading fourth-generation LBA environmentally friendly insulation combined with nano-scale VIP insulation, delivering improved temperature uniformity and superior thermal performance.**

The  $-86^{\circ}\text{C}$  ULT Upright Freezer from Pinnacle is designed to offer maximum efficiency and superior performance. Its superior insulation ensures optimal energy efficiency, while the advanced cooling system provides fast temperature recovery after door opening.

With lockable doors and a robust construction, this freezer provides secure storage for valuable samples and other temperature-sensitive materials. Whether you're storing biological samples, vaccines, or other medical products, the Pinnacle ULT freezer is the perfect choice for any laboratory.



# Technical Data for Pinnacle -86°C ULT Upright Freezers

Model		UDF-86U100	
Main specifications	Structural	Upright	
	Temperature range (°C)	-40~-86	
	Max. ambient temperature (°C)	32	
	Capacity(L)	100	
	Exterior dimensions WxDxH (mm)	760x680x818	
	Interior dimensions WxDxH (mm)	340x460x630	
	Weight(KG)	97	
	Insulation (mm)	85	
	Cooling technology	single system / static	
	Power (Watt)	500	
	Alarm functions	Alarm display	yes
		Visual / acoustic alarm	yes/yes
		Power failure alarm	yes
Adjustable high / low temperature alarm		yes/yes	
Open door alarm		yes	
Probe failure alarm		yes	
Low battery alarm		yes	
Condenser overheating alarm		Yes	
Ambient temperature alarm		Yes	
Battery backup for alarms (approx. hrs.)		72	
Data logging & external connection	USB port for data download	no	
	Remote alarm	yes	
	RS 485 port	yes	
Display features	Display type	10" touch screen	
	Password protection	yes	
Other features	Vacuum release port	no	
	Access port for external probe	1	
	Condenser filter	yes	
	Lock with key	yes	
	Can add a padlock	yes	
	Removable inner doors(pcs)	2 - optional 4	
	Adjustable shelves (pcs)	1	
	Max. load per shelf (kg)	50	
	Total capacity of rack(3x5)	4	
	Total capacity of cryobox(2 inches)	60	
Refrigeration & cabinet	Number of compressors	1 Variable speed	
	Refrigerant	Mixed refrigerant	
	Interior cabinet material	Stainless steel	
	Exterior cabinet material	"Galvanized steel+Power spraying "	
	Insulation material	polyurethane	
	Foam type	LBA (Honeywell)	
	VIP vacuum insulated panels	yes	

# Technical Data for Pinnacle -86°C ULT Upright Freezers

Model		UDF-86U430	UDF-86U580	UDF-86U730	UDF-86U860	UDF-86U990
Main specifications	Structural	Upright	Upright	Upright	Upright	Upright
	Temperature range (°C)	-40~-86	-40~-86	-40~-86	-40~-86	-40~-86
	Setting Temp Default (°C)	-80	-80	-80	-80	-80
	Max. ambient temperature (°C)	32	32	32	32	32
	Capacity (L)	430	580	730	860	990
	Exterior dimensions WxDxH (mm)	720x950x1980	870x950x1980	1035x950x1980	1155x950x1980	1290x950x1980
	Interior dimensions WxDxH (mm)	450x720x1310	600x720x1310	765x720x1310	885x720x1310	1020x720x1310
	Insulation (mm)	95	95	95	95	95
	Cooling technology	Dual system / static	Dual system / static	Dual system / static	Dual system / static	Dual system / static
	Power (Watt)	1100	1100	1200	1300	1500
Alarm functions	Alarm display	yes	yes	yes	yes	yes
	Visual / acoustic alarm	yes/yes	yes/yes	yes/yes	yes/yes	yes/yes
	Power failure alarm	yes	yes	yes	yes	yes
	Adjustable high / low temperature alarm	yes/yes	yes/yes	yes/yes	yes/yes	yes/yes
	Open door alarm	yes	yes	yes	yes	yes
	Probe failure alarm	yes	yes	yes	yes	yes
	Condenser overheating alarm	yes	yes	yes	yes	yes
	Ambient temperature alarm	yes	yes	yes	yes	yes
Display features	Display type	10" touch screen	10" touch screen	10" touch screen	10" touch screen	10" touch screen
	Password protection	yes	yes	yes	yes	yes
	Vacuum release port	yes	yes	yes	yes	yes
	Lock	yes	yes	yes	yes	yes
	Removable inner doors(pcs)	2	2	2	2	2 - optional 4
	Adjustable shelves (pcs)	3	3	3	3	3
	Max. load per shelf (kg)	50	50	50	50	50
Refrigeration & cabinet	Number of compressors	2	2	2	2	2
	Interior cabinet material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Exterior cabinet material	"Galvanized steel+ Power spraying "	"Galvanized steel+ Power spraying "	"Galvanized steel+ Power spraying "	"Galvanized steel+ Power spraying "	"Galvanized steel+ Power spraying "
	Insulation material	polyurethane	polyurethane	polyurethane	polyurethane	polyurethane
	VIP vacuum insulated panels	yes	yes	yes	yes	yes
	Foam material	LBA (Honeywell)	LBA (Honeywell)	LBA (Honeywell)	LBA (Honeywell)	LBA (Honeywell)