

DEEP FREEZER (-40°C)

ALS-INS063



DESCRIPTION

Deep Freezer (-40°C) ALS-INS063 deep freezer combines is a state-of-the-art design that delivers true fan-circulated convection. Our Deep Freezer is designed for storing sample and for convenient and safe use in many applications such as Animal & Plant Cell Culture, Food & Beverage Industry, Pharmaceutical & Healthcare Industry and Germination Tests

KEY FEATURES

Advanced, Adaptive, Microprocessor Control resulting in Superior Temperature Accuracy

- The deep freezer utilizes a sophisticated microprocessor control system that constantly monitors and adjusts the internal temperature. This advanced adaptive control minimizes fluctuations and ensures optimal conditions for storing temperature-sensitive materials.

High-quality LCD with Bright and Clear Visuals

- An intuitive LCD offers real-time monitoring of temperature and operational status with clear, bright visuals that are easy to read. This feature enhances user interaction by providing quick access to essential information and precise control of the freezer's settings.

High-Quality Compressor with Advanced Technology

- The freezer is equipped with a robust compressor that employs state-of-the-art cooling technology to deliver consistent and reliable performance. Designed for longevity, this high-quality compressor reduces maintenance needs while ensuring efficient operation even under continuous use.

CFC-Free (134A) Refrigeration System

- The refrigeration system uses R-134A refrigerant, an environmentally friendly alternative that is free from harmful CFCs. This eco-conscious design not only meets global environmental standards but also provides efficient cooling performance essential for maintaining low temperatures.

Corrosion Resistant 304- Stainless Steel Chamber and Shelves

- Constructed with 304-grade stainless steel, both the chamber and shelves offer excellent resistance to corrosion and rust. This ensures a durable, hygienic environment that safeguards sensitive items against contamination and degradation over time. The unit comes with three sturdy stainless-steel shelves, providing ample storage and organization for various items. These shelves are engineered to withstand extreme cold and heavy loads, ensuring both stability and durability in the freezer's harsh operating conditions.

Temperature Alarm Mechanism

- An integrated temperature alarm continuously monitors the internal environment and alerts users if the temperature deviates from the set range. This critical safety feature enables prompt corrective action, protecting valuable contents from potential damage due to temperature instability.

ADVANCED DIGITAL TEMPERATURE CONTROLLER

This is a temperature control unit designed for precise cooling applications. The touchscreen interface displays real-time temperature monitoring and settings. The different parameters display different functions in the control panel.

- ✓ **High-Precision Temperature Control** – Ensures accurate cooling with real-time monitoring
- ✓ **User-Friendly Touchscreen Display** – Intuitive interface for easy operation
- ✓ **Wide Temperature Range** – Supports ultra-low temperature settings
- ✓ **Smart Alarm System** – Alerts for temperature fluctuations and system errors
- ✓ **Data Logging & Analysis** – Tracks historical temperature trends for optimal performance
- ✓ **Robust & Durable Design** – Built to withstand industrial applications

FUNCTIONS OF THE DIFFERENT PARAMETERS

- **SVAL:** This is the Set Value (SVAL), indicating the target or desired internal temperature of the freezer.
- **PVAL:** This is the Present Value (PVAL), showing the current actual temperature inside the chamber.
- **Running:** Indicates that the freezer is currently operational and actively cooling to reach or maintain the set temperature.
- **Date and Time:** Displays the current date and time, useful for logging and time-stamping data for traceability and monitoring trends over time.
- **Setting (SETTING):** Opens the settings menu where users can configure temperature set points, calibration, and other operational preferences.
- **Curve (CURVE):** Displays historical temperature data in a graphical format, allowing users to monitor temperature stability and trends over time.
- **Data (DATA):** Provides access to logged temperature records and event history, useful for audits and performance analysis.
- **ALM (ALM):** Opens the alarm section where current or past alerts (like temperature deviations or door open alerts) can be viewed and acknowledged.



TECHNICAL SPECIFICATION

Model	ALS-INS063DF
Temperature range	-10°C to -40°C
Temperature accuracy	±0.5°C
Temperature uniformity	±0.1°C
Temperature controller	Dual display PID controller
Temperature sensor	PT100
Inner chamber	Stainless steel 304
External cabinet	Powder-coated GI sheet
Insulation	PUF Insulation
Noise	58 dB
Door	Insulated doormechanicallatch/clamp
Heaters	Resistance wireheaters
Shelves	Stainless steelwiremesh(removable)
Standard fittings	Main on/offswitch Load indicator Fan on/offswitch
Power supply	220 Volts50Hz
Optional Features	<ul style="list-style-type: none"> • GMP construction (Inner and Outer SS 304) • PLC + HMI controller with USB interface • 21 CFR Part 11 • Software • Data logger with USB interface • Thermal printer • Inner chamber LED light

ORDERING INFORMATION

Model No.	Size (Inches)	Volume (Liters)	Shelves
ALS-216DF	24 × 24 × 24	216	3
ALS-270DF	24 × 24 × 30	270	3
ALS-324DF	24 × 24 × 36	324	3
ALS-405DF	24 × 30 × 36	405	5
ALS-550DF	30 × 30 × 36	550	6
ALS-600DF	30 × 30 × 42	600	7