TcCryo Accessories

TCLMA-D1 Liquid Nitrogen Level Monitoring Alarm

Product Description:

TCLMA-D1 is a liquid nitrogen level monitoring alarm, which uses the high-precision sensor probe imported from Switzerland to ensure the excellent measurement performance of the product. Data is reported to the cloud monitoring platform without monitoring devices such as hosts and collectors. Set the temperature upper and lower limits. When the ambient temperature exceeds the upper and lower limits, the power is too low, the external power supply is disconnected, or the device is offline, the alarm alarm is triggered immediately. Support web page, mobile APP login view and export real-time data, etc.

Key Features:

- Global login web page, mobile APP can view data, support SMS alarm and email alarm.
- LCD large-screen display design, generous and beautiful, super stability and anti-interference ability.
- Imported high precision probe, high measuring accuracy, wide range, good consistency.
- The use of large capacity 18650 battery, rechargeable, battery anti-reverse connection, battery installed reverse will not burn machine, ultra-low power design, single battery power supply can maintain for four months (report interval of 10 minutes).
- Cloud monitoring high temperature, low temperature, high humidity, low humidity, offline, low power, power off, offline recording function, normal monitoring and recording data when disconnected, automatically reported to the cloud platform after the network.

Type	TCLMA-D1
Sensor type	2 meters per external
Temperature measurement range	-200°C ～ +200°C
Temperature measurement accuracy	±0.1°C
Local storage capacity	100,000 groups
Output interface	WIFI, USB
Battery capacity	Two knots 6000mAh
Rated voltage	USB power supply: 5V
	Battery power supply: 3.7V

The temperature probe is fixed at the appropriate position according to the actual requirements

TcCryo Accessories

Liquid nitrogen tank mobile trolley

Trolley for Tilting Liquid Nitrogen Tanks

TCQT-A30+ is made of all stainless steel.It can be used to easily transport liquid nitrogen biological containers indoors, which solves the difficulty of transporting large-volume liquid nitrogen biological containers and the purpose of assisting manual dumping of liquid nitrogen in the container. It has the advantages of safe and reliable transport and dumping of the liquid nitrogen container, and saving the operator's physical energy.

TCQT-A30+
Suitable for 30-35L

Mobile trolley for liquid nitrogen tanks

The transportation series is mainly designed to meet the customer's requirements for short-distance movement of medium and large liquid nitrogen containers. When in use, the container can be directly placed on the trolley, and it can be moved flexibly. It is convenient and labor-saving, safe and reliable.

TCMT-A

TCMT-X

TCMT-A100	TCMT-A30	TCMT-X50	TCMT-X30
Suitable for 65-210L	Suitable for 30~50L	Suitable for 50L	Suitable for 30-35L

TcCryo Accessories

Automatic liquid nitrogen transfer pump

Product Description:

The liquid nitrogen automatic transfer pump series is used to vaporize a small amount of liquid nitrogen stored in the container, so that the liquid nitrogen contained in the container is discharged to achieve the purpose of replenishing liquid nitrogen to other containers. Advantages such as low rate loss.

TcCryo automatic liquid nitrogen transfer pump is a high-precision intelligent transfer equipment integrating pressure measurement, display control and integration.It has the characteristics of simple operation, good shock resistance, high control accuracy, fast boosting, rapid liquid drainage, small liquid nitrogen loss and long service life.It can realize various functions such as easy start under low pressure, high pressure stop control, and the full range of control pressure can be set.The liquid nitrogen is rapidly vaporized in the vaporization chamber, resulting in a low pressure (≤0.08MPa), and the liquid nitrogen is automatically discharged from the liquid nitrogen container.Avoid the disadvantages of damage to the liquid nitrogen container and a large amount of volatilization loss of liquid nitrogen due to manual dumping.It is an ideal equipment for animal husbandry, medical and scientific research users to realize a small amount of liquid nitrogen transfer.

TCLNP-50

TCLNP-50A

Model	Compatible container diameter (mm)	Discharge pressure (≤MPa)	Discharge speed (L/min)
TCLNP-50	50	0.03	3-5
TCLNP-50A	50	0.05	6-8

TcCryo Accessories

Smart Bottle Stopper

Product Overview:

The 200-type smart bottle stopper for liquid nitrogen tanks is specially developed and produced for measuring the liquid level and temperature of aluminum liquid nitrogen tanks. It is suitable for the liquid level and temperature monitoring needs of all brands of aluminum liquid nitrogen tanks.
The product adopts an ultra-low power consumption design scheme, with a liquid crystal screen displaying the liquid level and temperature values in real time. The built-in high-efficiency nickel battery can maintain the device's operation for about 2 years.
By using ultra-low temperature monitoring technology and Internet of Things communication technology, it can monitor the temperature and liquid level in the liquid nitrogen tank in real time and upload the data to the tank network platform through various communication methods such as LORA and NB-IOT. This enables remote viewing, remote alarm, data processing, etc., and fully ensures the safety of sample storage in the liquid nitrogen tank.

Key Features:

- Integrated design for more convenient operation.
- Real-time display function for temperature and liquid level data.
- Real-time remote alarm system to ensure sample safety.
- Multiple alarm functions including SMS, voice, email, and WeChat.
- Automatic cloud data backup and export functions.
- Ultra-low power consumption design, no need for external power supply.
- High-precision dual independent measurement system for liquid level and temperature.

Specifications	SRIM-200B	SRIM-200D
Communication method	Lora	Nb-iot
Level measurement range	0～643mm (error ±5mm)	
Temperature measurement range	-200～+200°C (error±1°C)	
Application range	Applicable to all brands of aluminum liquid nitrogen tanks	
Operating temperature	-20～40°C	
Operating humidity	⩽75% (25°C)	
Input power	3.6V	
Power supply method	Nickel battery powered (replaceable)	
Installation method	Replacement of liquid nitrogen tank stopper	

TcCryo Accessories

Canisters & Racks

Canisters Product Description:

This stainless steel canister bucket is specifically designed for use in liquid nitrogen (LN_2) biological sample storage systems—compatible with both liquid-phase and vapor-phase dewars. It enables safe, efficient retrieval and organization of cryogenic samples such as vials, cell lines, sperm, embryos, and other frozen biological materials. Constructed from high-quality 304/316 stainless steel, the bucket offers exceptional durability at ultra-low temperatures, corrosion resistance, and structural integrity.

· **Customization available**

Key Features:

Easy Sample Access: Ergonomic handle allows smooth, vertical insertion and retrieval from liquid nitrogen—minimizing exposure time and temperature fluctuations for your samples.

Ultra-Low Temperature Resistant: Maintains strength and integrity at –196°C (–321°F) without cracking or warping.

Corrosion & Rust Resistant: Medical-grade stainless steel withstands repeated LN_2 exposure and moisture; easy to clean and sterilize.

TcCryo Accessories

Canisters & Racks

Racks Product Description:

A cryogenic storage solution crafted from high-quality stainless steel, designed for compatibility with large-neck liquid nitrogen dewars. It enables efficient sample retrieval and reliable long-term preservation of high-volume biological samples.

Key Features:

Multiple Configurations: Choose from 25-vial, 81-vial, or 100-vial capacities per layer to match your workflow and sample volume.

Layered Drawer Design: Each level slides out independently for quick visual identification and easy access—no need to remove entire racks.

Reinforced Handle: Extra-thick stainless steel lift bar resists bending and ensures safe, stable handling—even with frequent use.

Snap-Lock Frame System: Advanced interlocking joints replace traditional spot-welding for superior structural integrity and long-term durability.

Cryo-Optimized Materials: Stainless steel frame + impact-resistant polymer boxes remain stable and crack-free at ultra-low temperatures (down to –196°C).

Universal Compatibility: Fits most standard large-neck dewars from leading brands including Thermo Scientific™, MVE, Chart, Haier Biomedical, and more.

Model	Vial Capacity per Layer	Compatible Vial Type	Dewar Compatibility
CR-25	25 vials	2mL internal/external thread	Large-neck LN_2 dewars
CR-81	81 vials	2mL internal/external thread	Large-neck LN_2 dewars
CR-100	100 vials	2mL internal thread only	Large-neck LN_2 dewars

TcCryo Accessories

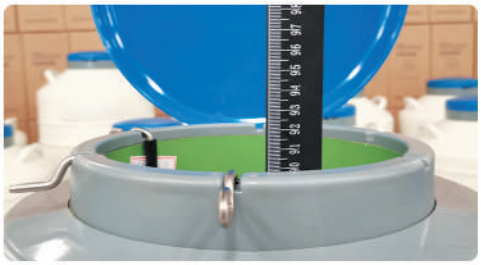
Liquid Nitrogen Level Dipstick

Product Description:

A simple, reliable tool for measuring liquid nitrogen levels in any standard dewar. Made from cryo-resistant material, this 100cm(40in) dipstick features clear markings and rugged construction—no power, no calibration, just accurate readings every time.

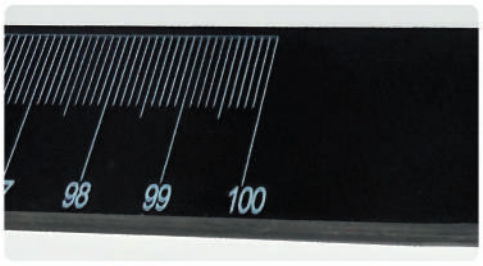
Key Features:

EUniversal Compatibility: Works with virtually all standard liquid nitrogen dewars—ideal for both liquid-phase and vapor-phase storage systems.



Cryo-Resistant Construction: Made from high-performance materials engineered to withstand extreme cold down to –196°C (–321°F) without cracking, warping, or degrading.

Clear, Precise Markings: Centimeter-scale graduations are laser-etched or printed for long-lasting readability—no guess-work when checking fill levels.



Rugged & Reliable: Reinforced design resists bending, impact, and repeated use in demanding lab environments.