

# CO<sub>2</sub> Back-up System

BS-1 is to ensure optimal security for critical samples stored in Ultra-Low Temperature Freezers. It controls injection of CO<sub>2</sub> into freezer when freezer temperature rises above the preset temperature value. It also reminds users to fill or replace their CO<sub>2</sub> cylinders when pressure is low.



## Advantage

- Compact design, small footprint, can be placed on freezer top
- Temperature display, setting temperature adjustable by user
- Unique low CO<sub>2</sub> alarm, reminding user to change CO<sub>2</sub> cylinder in time
- USA-made ASCO brand ultra-low temperature electromagnetic valve

## Safety

- Valve test button to check whether electromagnetic valve works normally
- High/Low temperature alarm, low battery alarm, low CO<sub>2</sub> alarm
- Stop injection of CO<sub>2</sub> when door opens, protecting user from being injured by liquid CO<sub>2</sub> (need to be connected with ULT freezer door switch).

## Reliability

- Stainless steel construction, rust-free, easy cleaning
- Hose & injection tube with sponge cover for insulation
- Rechargeable battery for 48 hours working time

	Model	BS-1
Basic	Climate Class	N/ST/T
	Cooling Type	Direct Cooling
	Refrigerant	Liquid CO <sub>2</sub>
Performance	Cooling Performance (°C)	-70
	Temperature Range (°C)	-40~-70
Control	Controller	Thermostat
	Display	LED
	Temperature Increment (°C)	1
Electrical	Power Supply	AC 100~240V, 50/60Hz
	Power (W)	20
	Electrical Current (A)	0.25
Weight & Dimension	Net/Gross Weight	11.2/13.6kg
		24.7/30lbs
	Exterior Dimension (W*D*H)	200*400*160 (mm)
		7.8*15.7*6.3 (in)
Packing Dimension (W*D*H)	370*530*330 (mm)	
	14.6*20.9*13 (in)	
Functions	High/Low Temperature Alarm	Yes
	Low Liquid CO <sub>2</sub> Alarm	Yes
	Low Battery Alarm	Yes
	Sensor Failure Alarm	Yes
	Main Power Failure Alarm	Yes
	Valve Open Indicator Light	Yes
	Main Power On Indicator Light	Yes
Valve Test Button	Yes	
Accessories	Hose (connecting backup system & CO <sub>2</sub> cylinder)	3 meter
	Injection Tube (connecting backup system & freezer)	2 meter

