# 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

- $\ensuremath{\cdot}$  Compact design, small footprint, can be placed on freezer top
- Temperature display, setting temperature adjustable by user
- $^{\bullet}$  Unique low CO\_2 alarm, reminding user to change CO\_2 cylinder in time
- USA-made ASCO brand ultra-low temperature electromagnetic valve

## RELIABILITY

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

### SAFETY

- Valve test button to check whether electromagnetic valve works normally
- High/Low temperature alarm, low battery alarm, low CO2 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).

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

	Model	BS-1
Basic	Climate Class	Ν
	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	•
	Low Liquid CO <sub>2</sub> Alarm	•
	Low Battery Alarm	•
	Sensor Failure Alarm	•
	Main Power Failure Alarm	•
	Valve Open Indicator Light	•
	Main Power On Indicator Light	•
	Valve Test Button	•
Accessories	*Hose (connecting backup system & CO <sub>2</sub> cylinder)	3 meter
	Injection Tube (connecting backup system & freezer)	2 meter



\*The specification of the joint connected to the CO2 cylinder is G 5/8  $^{\prime\prime}$