▼Options

Regulator IM-055
Two-phase pressure regulator.
Primary pressure regulator: 0-25 MPa
Secondary pressure regulator: 0-0.2 Mpa

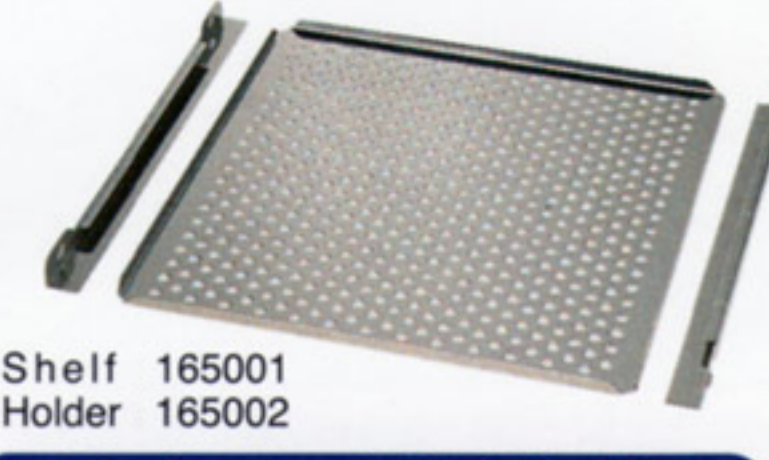**Gas Guard System** GS-701
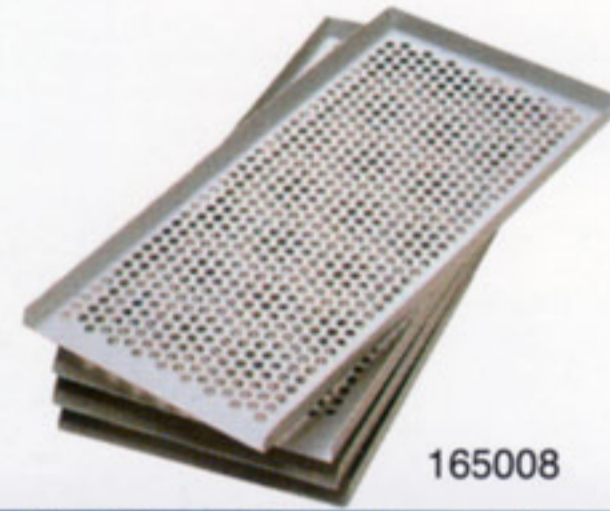Gas Guard System automatically switches to a backup gas tank when primnary tank runs out of gas.

Incubator Pedestals CM-011 CM-022
The IM-011 pedestal rolls on casters; the IM-022 is stationary, with level-adjusting screws.

Shelves and Shelf holders Shelf 165001 Holder 165002
Meshed stainless sheets. Six shelves are standard, with up to 21 shelves maximally.

Half-sized Aluminum trays 165008
Two half-sized trays can fit into each level. Lightweight and easy to handle, they make handling cultures easier and faster.

Shelf Door CM-100
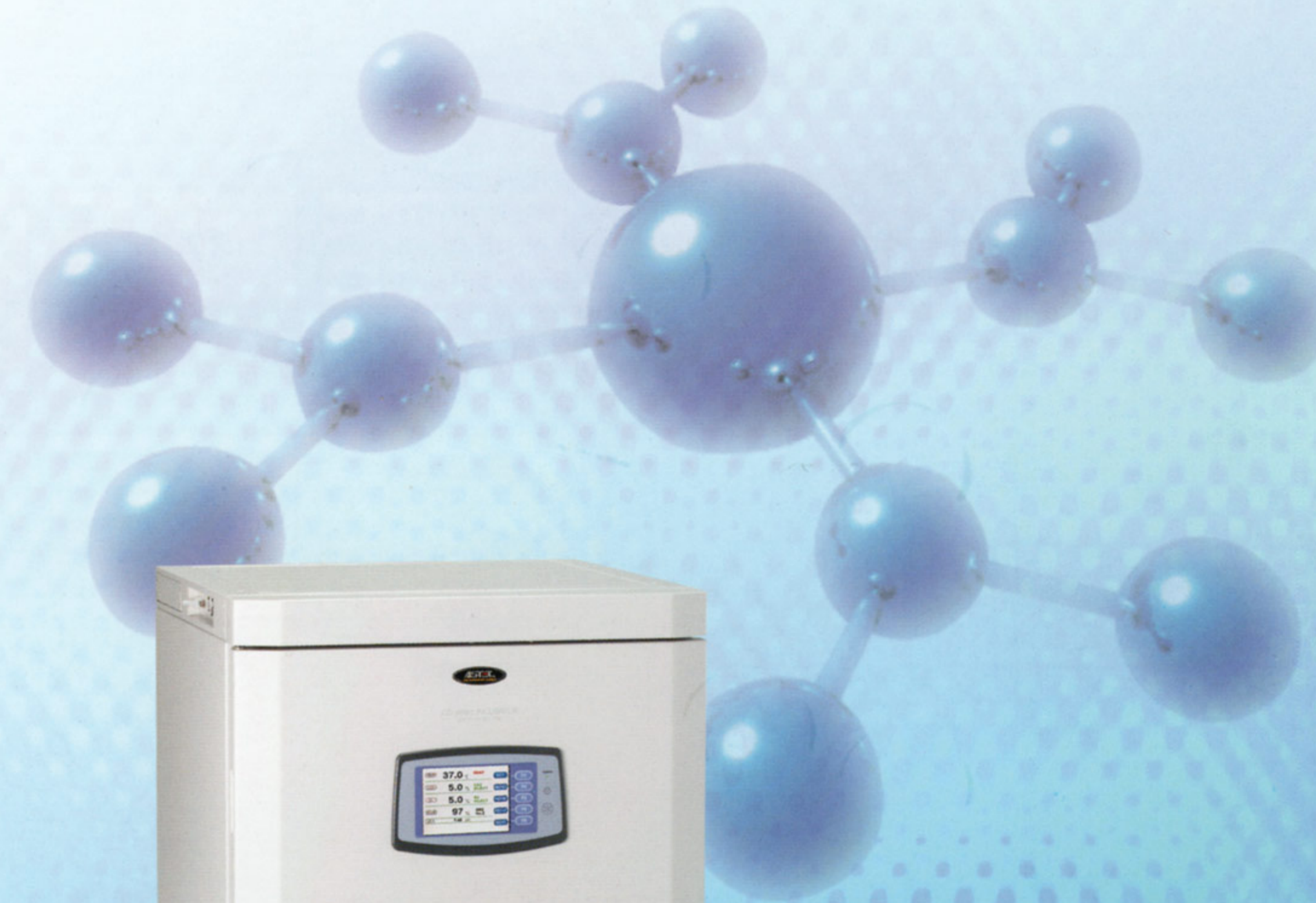Shelf doors minimize changes in temperature and gas consumption.

Printer

Dust filter IF-15（Replacement）

▼Specifications

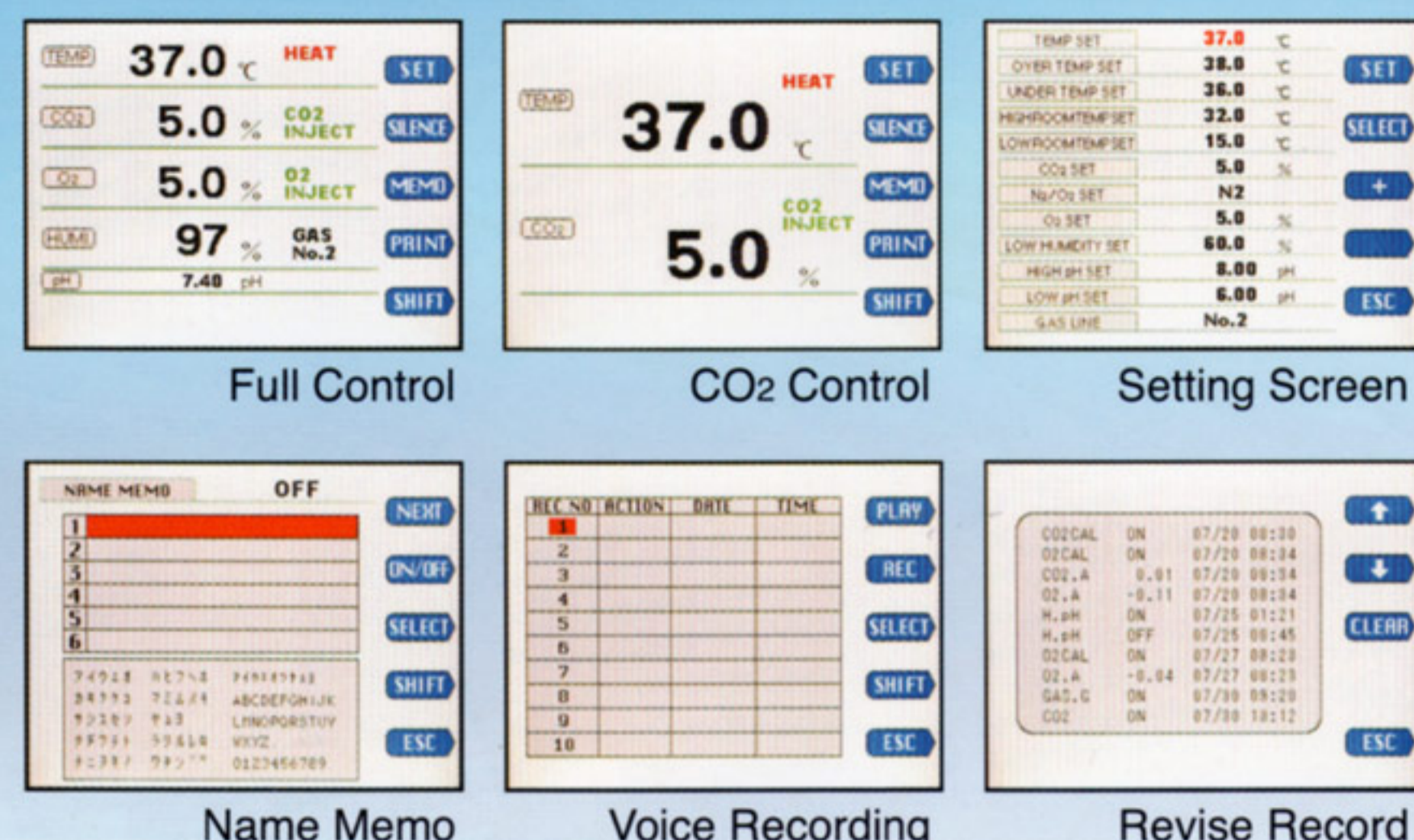|	Model	CDI-165	CDI-325	CDI-165M	CDI-325M
Dimensions	External Dimensions (mm)	W645×D625×H955	W645×D625×H1910	W645×D625×H955	W645×D625×H1910
	Internal Dimensions (mm)	W500×D480×H680	W500×D480×H680×2	W500×D480×H680	W500×D480×H680×2
	Capacity	163L	163L×2	163L	163L×2
	Shelf Dimensions	W430×D430×H15mm		W430×D430×H15mm	
	No. of shelves	6 （Max20）	12 （Max40）	6 （Max20）	12 （Max40）
Temperature	Heating	Water-jacket		Water-jacket	
	Jacket water	41L	41L×2	41L	41L×2
	Control	PID control		PID control	
	Temperature range	Ambient temperature +5℃~50℃		Ambient temperature +5℃~50℃	
	Temperature precision	±0.1℃		±0.1℃	
	Temperature distribution	±0.1℃		±0.1℃	
CO_2 Control	Sensor	IR sensor		IR sensor	
	Control	DUTY control		DUTY control	
	Concentration range	0~20%		0~20%	
	Control precision	±0.1%		±0.1%	
Humidification		Natural evaporation		Natural evaporation	
Humidity		>95%RH （CO_2 5%）		>95%RH （CO_2 5%, O_2 5%）	
O_2 Control	Sensor	Optional		Galvanic fuel-cell	
	Control			ON/OFF control	
	Concentration range			1%~80% （CO_2 5%）	
	Control precision			±0.5%	
Shelf door set		Optional		6 doors	
Gas guard system		Optional （Cylinder exchange device）			
Humidity sensor		Optional （Low humidity alarm settable）			
Printer Interface		RS-232C Up to 8 items (interval 20min) real time output, output the record for past 10days			
Printer		Optional Thermal printer			
Analog output		Optional at shipping (up to 8 items)			
Right door		Specify at shipping			
Usable Temperature range		5℃~30℃ （on use at 37℃）			
Usable humidity range		30%RH～80％RH			
Usable power range		1-layer AC95V～105V 50/60Hz			
Maximum power supply		AC100V 8A	AC100V 16A	AC100V 8A	AC100V 16A
Weight		95kg	190kg	95kg	190kg

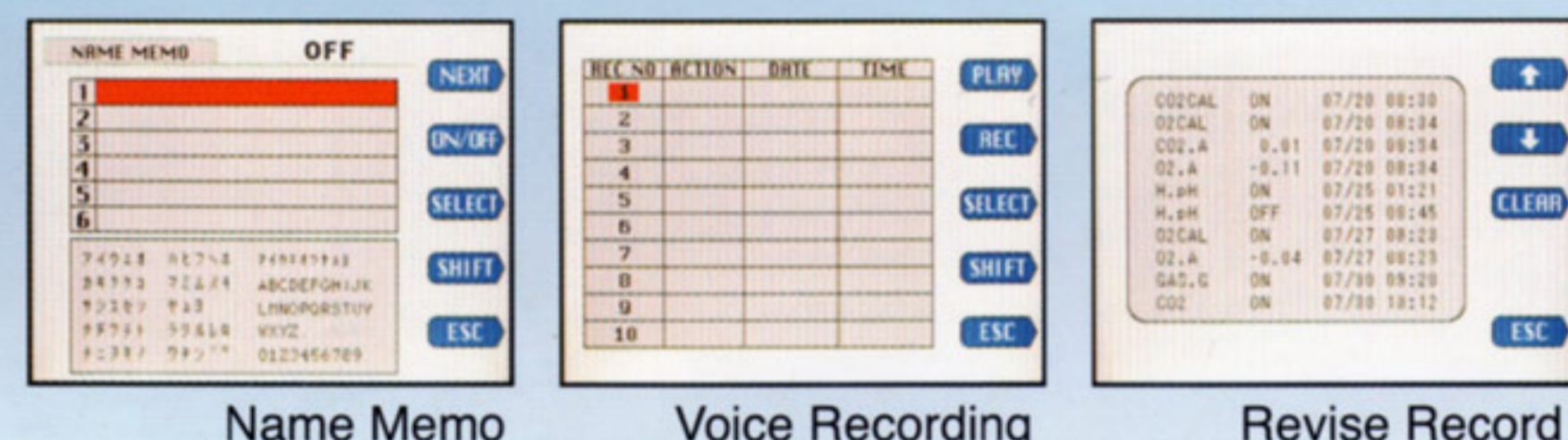**ASTEC**

CDI SERIES

CO₂/Multi Gas Incubator

- Color LCD display - Voice guidance - IR sensor - Auxiliary chamber heater
- Automatic calibration - Right/left door mounting and more!

Wide-format color LCD monitor

The new display not only shows the culture conditions, but also displays detailed warnings and cautions. Additionally, there are three formats for user-entered remarks that allow easier control of the culture conditions.

Full Control CO2 Control Setting Screen

Name Memo Voice Recording Revise Record

Voice guidance

A synthesized voice announces warnings and alarms. It is also possible to record the user's voice commands and play them at a pre-set time.

Alarms

Screen display	Voice guidance
ADD WATER	The jacket water level is low. Please add water.
OVER TEMP	The chamber temperature is too high.
UNDER TEMP	The chamber temperature is too low
CO2 ALARM	There is a CO_2 concentration error.
O2 ALARM	There is a O_2 concentration error.
LOW HUMIDITY	The chamber humidity is too low
GAS GUARD	One of the gas cylinders is empty
EXCHNAGE HUM	Please replace humidifying tray and add water.
NEWS MEMO	Please check a message on the display

Recording

Capacity	15sec/each msg (Up to 10msg)
Replay recorded data	Replay at door opening.
	Replay at pre-set time.
	Replay each week.

CO₂/Multi Gas Incubator

New functions for a new generation of incubator

- Color LCD display ▪ Voice guidance ▪ IR sensor ▪ Auxiliary chamber heater
- ▪ Automatic calibration ▪ Right/left door mounting and more!

CDI-165(Single)

CDI-325M(Double)

IR sensor

A new IR sensor for measuring CO_2 concentration is not affected by humidity changes inside the chamber. Unlike other sensors, the IR sensor does not change chamber humidity during its operation.

Automated calibration

The calibration of CO_2 and O_2 concentrations is automatically carried out a preset time.

Auxiliary chamber heater

An auxiliary chamber heater helps to return the inside temperature quickly after opening and closing the door. The heating rate for returning temperature is programmable.

Right/Left door mounting

The door can be mounted to open either from the left or right(Optional at shipping).

10-day data storage

Storing and printing out all of the 8-point data sets for the past 10 days is an easy operation (*printer optional), making troubleshooting problems simple. Continuous, real-time printing is also possible.

Serial interface

The standard chamber carries serial interface.

Analog output (optional)

An 8-point analog output of the following parameters can be used for validation:
*Chamber temperature
*Water-jacket temperature
*CO2 concentration
*Humidity (with humidity sensor on)
*Exterior door temperature
*Room temperature
*O2 concentration
*pH (with pH sensor on)

Full range of accessories

*Gas Guard system. automatic changeover device for switching gas cylinders.
*Humidity monitor· allows setting of the monitor and low-humidity alarm.
*pH monitor· easy monitoring only by connecting to the pH sensor.