

AIR JACKET CO₂ INCUBATOR

Incubator for cell and tissues, cultures including development of ova or embryos at or near body temperature

체온에 가까운 온도로 난소배아생장을 포함한 세포 및 조직배양을 위한 인큐베이터



LabTech

DAIHAN LABTECH CO., LTD / (주)대한랩테크

Air-jacketted Temperature Control System

CO₂ range: **0 to 20%**

Temperature range : **ambient +5°C to 50°C**

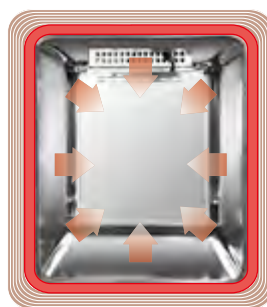


Air circulation fan



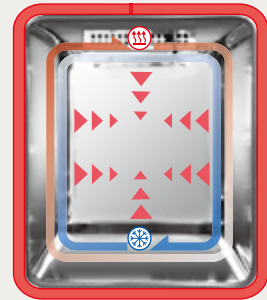
CO₂, O₂ concentration improve uniformity
온.습도 및 이산화탄소 농도가 순환팬에 의해 균일성 향상

Air jacket chamber



well insulated air jacket chamber maintains excellent and stable temperature uniformity
안정적인 온도 균일성을 유지하는 에어 재킷 챔버

In direct heat



heaters installed on the surface of the chamber provide even temperature
챔버 표면에 설치된 열선으로 온도가 균일하게 분배

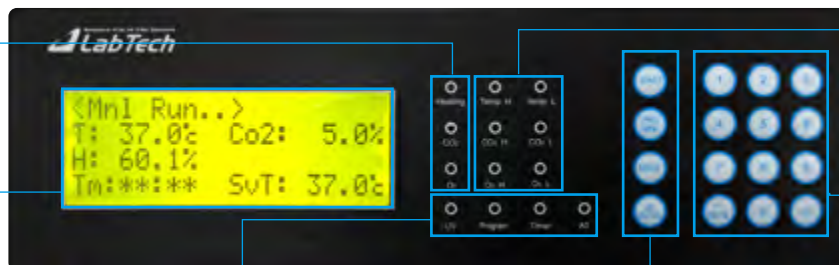
Microprocessor Digital Controller with LCD Display | 마이크로프로세서 디지털 조절기

• Indicates current temperature and CO₂ concentration, humidity
현재의 온도 및 CO₂ 농도, 습도를 나타냄

• Set value display - Indicates set temperature
설정값 표시 - 설정 온도를 나타냄

Output display
lit up when heating/
CO₂ gas, N₂(option)
gas is supplying
가열, CO₂, N₂ (옵션) 가스가
공급될 때 점등

LCD Display
LCD 디스플레이



Alarm display
temp. High/low,
CO₂ High/low,
O₂ High/low alarm
온도 높음/낮음, CO₂ 농도 높음/낮음,
O₂ 농도 높음/낮음 경보 알람 표시

Input numbers, move to
the left column, UV on/off
숫자 입력, 자리 수 이동, UV 켜기/끄기

UV lamp, Program mode, Timer, Auto-tuning function display
UV 램프, 프로그램 모드, 타이머, 자동 조정 기능 표시

Start/Stop, Switch mode from program mode, Normal mode,
Enter set value/Auto-tuning
시작/정지, 프로그램 모드에서 모드 전환, 일반 모드, 설정 값 입력 및 자동 조정

Normal mode display



A set value that keeps the internal environment of the chamber
Normal mode는 하나의 설정 값으로 챔버 내부 환경을 유지

Program mode display



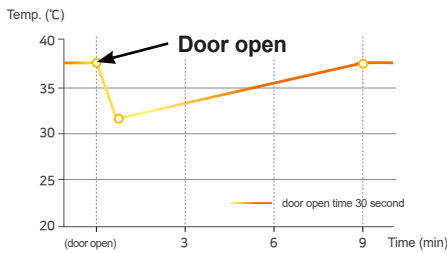
Mode to change the internal environment of the chamber
up to 10 steps
Program mode는 10단계 까지 챔버 내부 환경을 변경 가능

UV lamp display (option)



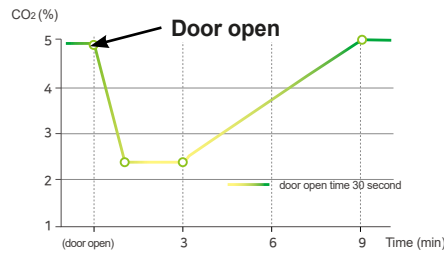
Technical data

Temperature(°C) recovery time



at 37°C, door open 30 sec.
37도 기준, 30초 도어 열림 시 온도 회복 시간

CO2 (%) recovery time



at 5%, door open 30 sec.
5% 기준, 30초 도어 열림 시 CO2 농도 회복 시간

Safety

Audible & visible alarm

- High / Low temperature alarm
- High / Low CO2 concentration alarm
- High / Low O2 concentration alarm
- Door opening warning alarm
- Temperature sensor failure alarm

Over temperature protection

Earth leakage circuit breaker

Standard gas regulator



Increase stability by installing regulator on its own
제품 자체적으로 레귤러를 장착하여 안정성을 높임

Gas tight inner glass door



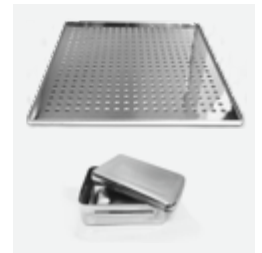
Rugged glass door enclosure to prevent gas leakage
견고한 유리도어 밀폐 구조로 가스 누설 방지

NDIR CO2 sensor



It detect CO2 precisely regardless of changing in temp. or humi. detection respond is also fast and it is helpful to control CO2 accurately
온도나 습도 변화에 따라 CO2를 정확하게 감지하며 빠른 반응과 정밀한 조절

Standard accessory



Stainless steel perforated shelves & water container
스테인리스 타공 선반과 저수조

MODEL		LCO-065 AI	LCO-165 AI	LCO-265 AI	LCO-365 AI
Dimensions (W×D×Hmm)	Chamber	350 × 360 × 400	450 × 450 × 500	500 × 500 × 600	600 × 600 × 900
	Exterior	500 × 550 × 750	600 × 640 × 850	650 × 690 × 950	750 × 790 × 1250
	Shelf	330 × 332	428 × 422	478 × 472	578 × 572
Capacity		50 ℓ	100 ℓ	150 ℓ	320 ℓ
Temperature	Range	Ambient + 5°C to 50°C Accuracy ± 0.1°C, Uniformity ± 0.5°C			
Humidity	Range	90 to 95% RH			
CO2	Range	0 to 20%, Accuracy ± 0.1%			
Heater		300 W	500 W	600 W	900 W
Controller		Digital PID controller with multi-function			
Material	Interior	Stainless steel 304			
	Exterior	Epoxy powder coated steel			
Safety		Over temperature protection			
Stainless steel perforated shelf		2 EA	2 EA	2 EA	3 EA
Electric supply		110V, 60Hz or 220V, 50/60Hz 1Phase			
Power consumption (220V)		1.5 A	2.5 A	3 A	4.5 A
Net weight (Approx.)		50 kg	70 kg	80 kg	130 kg
Shipping dimensions (approx.) (W×D×Hmm)		720 × 670 × 1060	760 × 800 × 1120	730 × 810 × 1130	850 × 960 × 1440
Shipping weight (approx.)		65 kg	80 kg	92 kg	145 kg

MODEL		LCO-065 AIN	LCO-165 AIN	LCO-265 AIN	LCO-365 AIN
O2 (Option)	Range	1 to 20%, Accuracy ± 0.2% (O2 Sensor, N Gas inlet)			

Remark Specifications can be changed for quality improvement
품질 개선을 위해 사전 통보없이 사양은 변경될 수 있습니다

Overall dimensions is included the size of handle, casters
외부 규격은 돌출된 도어 핸들, 힌지, 바퀴 등이 포함된 치수입니다

Option 옵션



Digital thermal recorder (1CH or 2CH)
감열식 레코더



UV Disinfection lamp
UV 램프
Sterilize the chamber by UV lamp

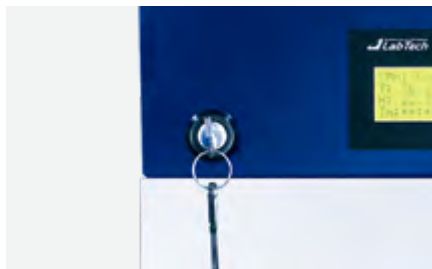


Change door handle direction
도어 핸들 방향 변경
Can change the left and right sides of the door opening
* Please specify it when ordering (주문전에 제공)



Segmented inner door
분할 내부 도어

LCO-065AI	LCO-165AI, 265AI	LCO-365AI
2 EA	3 EA	4 EA



Door lock
도어 잠금 장치
It can be used by installing a lock on the product



Access port
액세스 포트

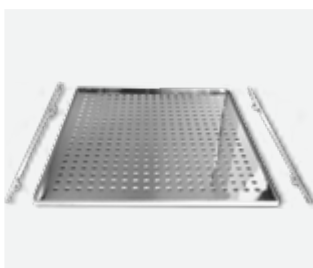


IQ/OQ Validation documentation at factory
IQ/OQ 밸리데이션
* Available with the product on site only



Stackable design
적재가능한 설계
Excellent space utilization (Max. 2ea)
* Excluding LCO-365AI model
* Please specify it when ordering (주문전에 제공)

Accessory 악세서리



Stainless steel perforated shelf set
추가 선반 세트



Membrane filter
멤브레인 필터



Water container
추가 저수조



Gas regulator for CO₂ / N₂
CO₂ / N₂ 가스 레귤레이터