

ARA



P series
CO₂ INCUBATOR



M series
DEEP FREEZER

ARA P series

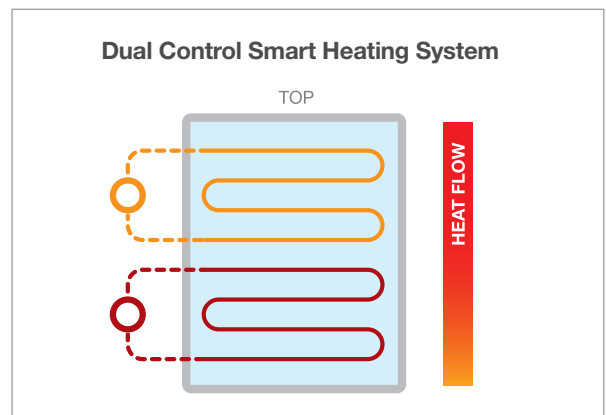
CO₂ INCUBATOR

Features

- Direct heating, air jacketed CO₂ incubator
- Internal max. capacity 150 L
- No fan, no vibration, no maintenance of HEPA filter, no spread-out of contamination
- Maximized inner space by no fan structure
- Easy to clean interior and big water pan
- Dual beam NDIR CO₂ sensor
- Intuitive 7" control screen and informative display
- Optional two or three divided inner doors



Touchscreen with graphic display, and an USB port for data transfer



Technical Specification

Model	ARA P150	
Inner capacity	150 L	
External dimension (W x D x H, mm)	657 x 741 x 877	
Net weight, kg	62 kg	
Shelves	Shelves	3 standard, 6 maximum
	Area dimension	425 x 466 mm
	Material	SUS
Door left/right	Factory installed	
Fan	No	
Temperature control	Heating method	Direct heating by 6 separate heaters
	Control system	Microprocessor PID
	Control range	Amb. +5/50
	Accuracy	±0.2
	Uniformity	±0.3
CO ₂ control	Recovery rate	< 10 min
	Control system	Microprocessor PID
	Sensor (T.C./I.R.)	Dual IR
	Control range	0-20%
	Control accuracy	±0.1
rH system	Recovery rate	< 7 min
	Humidity method	Water pan
	Humidity range, %RH	92~98%
	Water level alarm	Yes
Decontamination	Hydrogen peroxide / UV (optional)	
Display	7" LCD, touchscreen	
Data tracking	240 hours continuous	

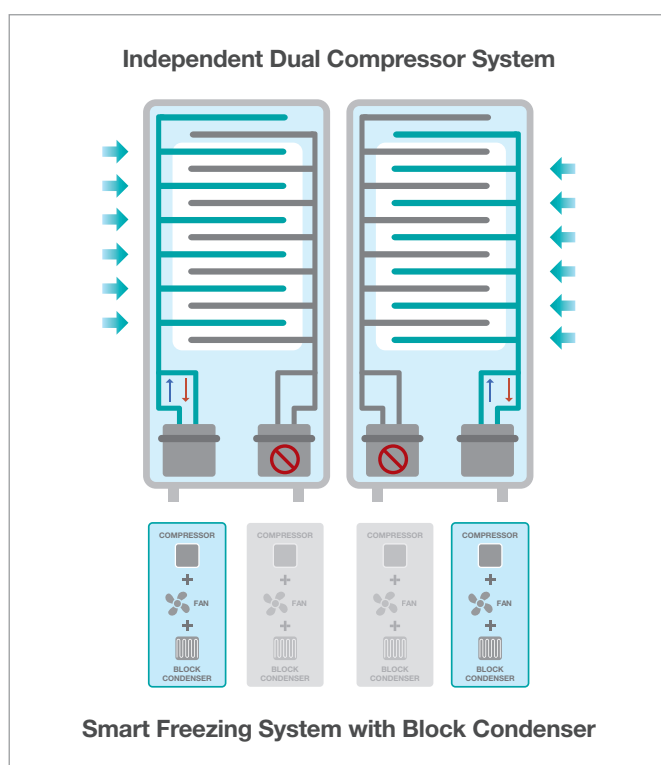
ARA M series

DEEP FREEZER



Features

- Fast pull-down and recovery to optimal storage temperature
- Automatic door for safety lock and easy unlock (Manual type is optionally available.)
- Independent dual compressor system with no oil separator and expansion tank
- Unique pin-less block condenser with no filter structure
- Dual controller construction for failure-free operation
- Exclusive recipe, CFC-free mixed refrigerants
- Controllable ECO mode of dual compressor model for energy saving operation
- Informative 7" display and control screen
- Chart recorder and LCO₂ back-up system available



Technical Specification

Capacity	80, 308, 393, 503, or 714 Lit.	
Temperature range	-86°C/-80°C ~ -65°C or -95°C/-90°C ~ -65°C	
Compressor	Hermetic type Single or independent dual compressor (Eco mode of dual type for economic operation)	
Condenser type	Block condenser, no pin, filter free mechanism	
Refrigerant	Natural (CFC free refrigerant system)	
Controller & Display	Failure free dual controller and 7" touchscreen TFT LCD	
Door	Door opening and closing by pressing a touch button on control screen (optional - Manual Door)	
Material	Internal	Stainless steel
	External	Powder coated steel plate
Power supply	Single phase, AC 230V, 50/60Hz (optional AC 120V, 60Hz)	

Ordering Information

ARA P series

ARA P150

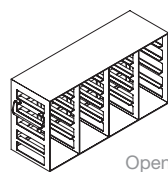
Cat. No.	Product
APL150	ARA P150 CO ₂ Incubator with Single Glass Door, Left-Open
APR150	ARA P150 CO ₂ Incubator with Single Glass Door, Right-Open
APA-SPS	Shelf with 2 Supports, perforated, SS
APA-CGS	CO ₂ gas pressure regulator

ARA M series

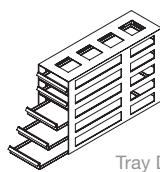
ARA M80 / ARA M300 / ARA MD300 / ARA M400 / ARA MD400 / ARA M500 / ARA MD500 / ARA M700 / ARA MD700

Model	ARA M80	ARA M300	ARA MD300	ARA M400	ARA MD400	ARA M500	ARA MD500	ARA M700	ARA MD700	
Capacity	82 Lit.	308 Lit.		393 Lit.		503 Lit.		714 Lit.		
Temperature range	-86°C ~ -65°C	-86°C ~ -65°C	-95°C ~ -65°C	-86°C ~ -65°C	-95°C ~ -65°C	-86°C ~ -65°C	-95°C ~ -65°C	-80°C ~ -65°C	-90°C ~ -65°C	
Compressor	Single	Single	Dual, Independent	Single	Dual, Independent	Single	Dual, Independent	Single	Dual, Independent	
Rack Capacity	4 pcs of 12 (3 x 4) Placed Rack	12 pcs of 15 (3 x 5) Placed Rack		16 pcs of 15 (3 x 5) Placed Rack		16 pcs of 20 (4 x 5) Placed Rack		24 pcs of 20 (4 x 5) Placed Rack		
Dimension (W x D x H, mm)	Internal	340 x 485 x 520		470 x 500 x 1,310		600 x 640 x 1,310		880 x 620 x 1,310		
	External	530 x 687 x 1,060		710 x 750 x 1,900		840 x 890 x 1,900		1,120 x 870 x 1,900		
Net Weight	102 kg	180 kg	220 kg	210 kg	260 kg	240 kg	300 kg	320 kg	320 kg	
Power Requirement	Dual mode	321 W/h	352 W/h	398 W/h	373 W/h	474 W/h	458 W/h	507W/h	503 W/h	596 W/h
	Eco. mode			352 W/h		373 W/h		458 W/h		503 W/h
Cat. No.	Auto door	AMUS080	AMUS300	AMUD300	AMUS400	AMUD400	AMUS500	AMUD500	AMUS700	AMUD700
	Manual door	AMUS080-M	AMUS300-M	AMUD300-M	AMUS400-M	AMUD400-M	AMUS500-M	AMUD500-M	AMUS700-M	AMUD700-M

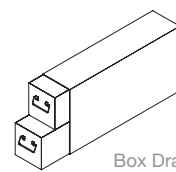
Stainless Steel Rack for Upright Type Freezer



Open Rack



Tray Drawer



Box Drawer

Rack size	Small Size Rack			Medium Size Rack			Large Size Rack		
Rack type	Open Rack	Tray Drawer	Box Drawer	Open Rack	Tray Drawer	Box Drawer	Open Rack	Tray Drawer	Box Drawer
Dimension (W x D x H, mm)	140 x 430 x 220		140 x 410 x 220	140 x 430 x 290		140 x 425 x 290	140 x 570 x 290		
Applicable Freezer	ARA M80			ARA M(D)300/400			ARA M(D)500/700		
Quantity of Available Boxes	12 ea (3 x 4)			15 ea (3 x 5)		12 ea (3 x 4)	20 ea (4 x 5)		16 ea (4 x 4)
Cat. No.	AMA-ORS	AMA-TDS	AMA-BDS	AMA-ORM	AMA-TDM	AMA-BDM	AMA-ORL	AMA-TDL	AMA-BDL

Freezer Box

Cat. No.	Product
AMA-B001	Freezer box, Paper, with Dividers for 9 x 9 holes, w127 x d127 x h52 mm
AMA-B002	Freezer box, PP, with Dividers for 9 x 9 holes, w127 x d127 x h52 mm

Others

Cat. No.	Product
AMA-TR622	Temperature Chart Recorder, TR622
AMA-LCO	LCO ₂ Backup System