

**CO2 Incubator / 165L**

	SCA 165DS	SCA 165DRS	SCA 165D	SCA 165DR
CO2 Sensor	T/C	Infra-Red	T/C	Infra-Red
Ex Dimensions(W x D x H)	625 x 635 x 915 (mm) / 24.6 x 25.0 x 36.0 (Inches)			
Int. Dimensions(W x D x H)	510 x 500 x 640 (mm) / 20.0 x 19.6 x 25.2 (Inches)			
Shelves	4 shelves (Standard) / Max 19 shelves			
Shelf material	Stainless Steel			
Access port	Standard / upper right side in the back			
Temp. Range	5°C above ambient to 50°C			
Temp. Uniformity	±0.3°C			
Dry Sterilization	60°C to 140°C		N/A	
CO2 range	0%~20.0%			
CO2 accuracy	±0.1%			
Humidity	95%±3% by natural evaporation			
Weight	85kg		80kg	
Power	AC100V / 120V / 220V / 230V			

**Tri Gas Incubator / 165L**

	SMA 165DS	SMA 165DRS	SMA 165D	SMA 165DR
CO2 Sensor	T/C	Infra-Red	T/C	Infra-Red
O2 Sensor	Galvanic battery sensor			
Ex Dimensions(W x D x H)	625 x 635 x 915 (mm) / 24.6 x 25.0 x 36.0 (Inches)			
Int. Dimensions(W x D x H)	510 x 500 x 640 (mm) / 20.0 x 19.6 x 25.2 (Inches)			
Shelves	4 shelves (Standard) / Max 19 shelves			
Shelf material	Stainless Steel			
Access port	Standard / upper right side in the back			
Temp. Range	5°C above ambient to 50°C			
Temp. Uniformity	±0.3°C			
Dry Sterilization	60°C to 140°C		N/A	
CO2 range	0%~20.0%			
CO2 accuracy	±0.1%			
O2 range	2.0%~80.0%*1			
O2 accuracy	±0.5%			
Humidity	95%±3% by natural evaporation			
Weight	85kg		80kg	
Power	AC100V / 120V / 220V / 230V			

**CO2 Incubator / 80L**

	SCA 80DS	SCA 80DRS	SCA 80D	SCA 80DR
CO2 Sensor	T/C	Infra-Red	T/C	Infra-Red
Ex Dimensions(W x D x H)	533 x 506 x 760 (mm) / 20.0 x 19.9 x 29.9 (Inches)			
Int. Dimensions(W x D x H)	418 x 377 x 510 (mm) / 16.4 x 14.8 x 20.0 (Inches)			
Shelves	4 shelves (Standard) / Max 13 shelves			
Shelf material	Stainless Steel			
Access port	Standard / Upper right side in the back			
Temp. Range	5°C above ambient to 50°C			
Temp. Uniformity	±0.3°C			
Dry Sterilization	60°C to 140°C		N/A	
CO2 range	0%~20.0%			
CO2 accuracy	±0.1%			
Humidity	95%±3% by natural evaporation			
Weight	63kg			
Power	AC100V / 120V / 220V / 230V			

**Tri Gas Incubator / 80L**

	SMA 80DS	SMA 80DRS	SMA 80D	SMA 80DR
CO2 Sensor	T/C	Infra-Red	T/C	Infra-Red
O2 Sensor	Galvanic battery sensor			
Ex Dimensions(W x D x H)	533 x 506 x 760 (mm) / 20.0 x 19.9 x 29.9 (Inches)			
Int. Dimensions(W x D x H)	418 x 377 x 510 (mm) / 16.4 x 14.8 x 20.0 (Inches)			
Shelves	4 shelves (Standard) / Max 13 shelves			
Shelf material	Stainless Steel			
Access port	Standard / Upper right side in the back			
Temp. Range	5°C above ambient to 50°C			
Temp. Uniformity	±0.3°C			
Dry Sterilization	60°C to 140°C		60°C to 140°C	
CO2 range	0%~20.0%			
CO2 accuracy	±0.1%			
O2 range	2.0%~80.0%*1			
O2 accuracy	±0.5%			
Humidity	95%±3% by natural evaporation			
Weight	63kg			
Power	AC100V / 120V / 220V / 230V			

**CO2 Incubator / 30L**

	SCA-30DRS	SCA-30D	SCA-30DR
CO2 Sensor	Infrared	T/C	Infrared
Ex Dimensions(W x D x H)	415 x 486 x 546 (mm) 16.3 x 19.1 x 21.5 (Inches)	415 x 410 x 515(mm) 16.3 x 16.1 x 20.1(Inches)	
Int. Dimensions(W x D x H)	310 x 295 x 330(mm) / 12.2 x 11.6 x 13.0(Inches)		
Shelves	2 Shelves( Standard) / Max 3 Shelves		
Shelve Material	Stainless Steel		
Access port	Standard / Right Lateral	Option	
Temp. Range	5.0°C above ambient to 50.0°C		
Temp. Uniformity	±0.3°C		
Dry Sterilization	60°C to 140°C		N/A
CO2 Control Range	0.0% ~ 20.0%		
CO2 accuracy	95%±4% by natural evaporation		
Humidity	95%±3% by natural evaporation		
Weights	36kg	30kg	
Power	AC100V / 120V / 220V / 230V		

**Tri Gas Incubator / 30L**

	SMA-30DRS	SMA-30D	SMA-30DR
CO2 Sensor	Infrared	T/C	Infrared
O2 Sensor	Galvanic battery sensor		
Ex Dimensions(W x D x H)	415 x 486 x 546 (mm) 16.3 x 19.1 x 21.5 (Inches)	415 x 410 x 515(mm) 16.3 x 16.1 x 20.1(Inches)	
Interior Dimension(W x D x H)	310 x 295 x 330(mm) / 12.2 x 11.6 x 13.0(Inches)		
Shelves	2 Shelves( Standard) / Max 3 Shelves		
Shelve Material	Stainless Steel		
Access port	Standard / Right Lateral	Option	
Temp. Range	5.0°C above ambient to 50.0°C		
Temp. Uniformity	±0.3°C		
Dry Sterilization	60°C to 140°C		N/A
CO2 Control Range	0.0% ~ 20.0%		
CO2 accuracy	±0.1%		
O2 range	1.0% ~ 89.0% *1		
O2 accuracy	±0.5%		
Humidity	95%±4% by natural evaporation		
Weights	36kg	30kg	
Power	AC100V / 120V / 220V / 230V		



**Direct Heat Incubator  
SCA/SMA Series**

The above specifications are based on the following configuration. Temperature: 37°C, CO2: 5.0%, O2: 5.0%

\*1 O2 concentration range 18%-23% may not be uncontrollable due to various conditions.

The specification may change without prior notice.



## The Durable, Stable & Long Standing Legends

Our long-trusted incubator series with a direct heating system. SCA/SMA Direct Heat incubators provide extremely reliable performance along with a user friendly operation. From basic to cutting-edge & high demand research applications, the SCA/SMA series is designed to let you accomplish your work in the lab. Stackable incubators available in sizes of 30, 80 and 165 liters, with Infra-red (IR) or Thermal conductive (TC) CO2 sensors, optional O2 control, and with or without dry-heat sterilization, we have models to fit your needs. All Astec SCA incubators come with a two year warranty.



## Direct Heat / Air Jacketed

High-performance heating elements are appropriately placed all around the chamber to provide uniformly distributed temperature throughout the incubation chamber. The industry's best temperature system eliminates the risk of contamination due to condensation as much as possible.

\*Available with high-temperature decontamination feature.



## Unique Airflow System Designed for Fast Humidity Recovery

Astec airflow system and the chamber's internal fan drive the humidified air throughout the chamber evenly and swiftly. The optimum humidity and CO2 concentration for cell culture will be restored in approximately 10 minutes after routine door opening/closing.

\*Above data is based on our internal testing with 30 second door opening.

## Custom-Built for YOU

Available with a full glass inner main door or Stainless Steel, Multi-level Separated Access Windows & a whole lot more.

\*The inner chamber corners have been ergonomically rounded to make your setup and cleaning a speedy process.



Optional shelf doors minimize the drastic change in the environment inside the chamber and reduce the amount of gas consumption and the risk of contamination.

### SCA/SMA-165

IM-102(2pcs)W451×H234mm×2pcs  
IM-103(3pcs)W451×H155mm×3pcs  
IM-104(4pcs)W451×H116mm×4pcs  
IM-100(6pcs)W451×H77mm×6pcs

### SCA/SMA-80

IM-802(2pcs)W363×H184mm×2pcs  
IM-804(4pcs)W363×H91mm×4pcs

\*Only for 165L and 80L

## Distinct Models, Unique Features

The SCA/SMA series offer a wide variety of options to choose from that best suit your needs & budget.

## DS Standard Type

Cost-effective air-jacketed incubator at a very reasonable price

## DR IR Sensor

Unaffected by the temperature and humidity changes inside the chamber, the IR sensor controls the CO2 concentration precisely and maintains the optimum cell culture environment

## DS Dry Heat Sterilization Feature

With programmable sterilization temperature (max.140°C)and time (max.10 hours),the Dry Heat Sterilization Feature is an easy and effective tool against contamination.

## DRS IR Sensor + Dry Heat Sterilization

High-grade model equipped with the combined advantages of the IR sensor and Dry Heat Sterilization Feature.



Standard Access Port readily available in the back of the incubator for using shakers or mixers inside the chambers

\*Only for 165L and 80L



**Air Filter**  
165L : IF-200  
80L : IF-80  
30L : IF-30A



**Gas regulator**  
IM-055



**Cart**  
165L : IM-011  
80L : IM-811  
30L : 360004-C(1 unit)or AP30STD(up to 3 units)



**Cart**  
165L : IM-033  
80L : IM-833

**Brackets for stacking**  
165L : 2064AB-5  
80L : 2064A-B  
30L : 0201-2