



# Plant Growth Chamber Multi Application MA1000

## Product Overview/Applications

With its unique ability to adapt to four different research applications, the adaptis a1000 offers an economical and flexible equipment platform. The base chamber itself can be fitted with one of four specially configured kits, and each kit is specifically designed for a particular application including:

- Plant growth
- Arabidopsis
- Tissue Culture
- Incubation

by varying the configuration of the airflow, light, and shelving, each kit defines one of the four applications. the a1000 is also available with several options such as phenolic coated coils and network communication. The phenolic coated coils enable the a1000 to be used for entomology research while the communications option facilitates connection to a facility's local area network.

## Lighting

the lighting systems for the a1000 incorporate high efficiency t5 fluorescent lamps. Lighting system configuration is determined by the application kit where each kit stipulates a particular light intensity and lamp canopy configuration. Lamp and ballast combinations have been designed to ensure a balanced light spectrum while light intensity levels are adjusted (aR & pG Kits only) through a stepped selection process.

## Airflow

precisely designed and manufactured air plenums are used for each of the four application kits. the plant Growth kit utilizes a solid rear plenum which discharges air from the floor for a uniform upward airflow. The arabidopsis and Incubation kits both use a perforated rear plenum which discharges the air horizontally for maximum condition uniformity in view of the use of flats or similar research vessels. the tissue Culture configuration incorporates individual air-shelves that discharge air vertically to reduce or eliminate condensation within media dishes

## Refrigeration

The standard air-cooled refrigeration system is optimized to ensure adequate capacity for delivery of uniform conditions regardless of the particular kit installed. Kits do not alter the configuration of the refrigeration system and as such, kits can be exchanged with minimal effort.

## Experiment Protection

User programmable alarms for key parameters such as temperature and humidity monitor the actual conditions within the chamber and notify the user with both audible and visual alarms. additional factory pre set alarms monitor system integrity while an alarm history recorder tabulates alarm events for historical reference and service.

## Key Product Attributes

- Single chamber uniquely adaptable to four different applications
- Precisely designed airflow and lighting configurations for each application
- Castors for ease of mobility
- Product certifications/markings: CE



## Performance Data

Model No	Temperature Range (°C)	Interior Capacity	Growth Area	Growth Height	Exterior Dimensions (WxDxH)	Light Intensities (6in. from lamp)	Electrical Service	Weight
MT-1000					42"x33"x 80" 1040 x 825 x 2020 (mm)	as below, @ 25°C	220/240- 1Ø-50Hz 120-1Ø- 60Hz	795 lb 360 Kg
TC Kit	-2°C to +40°C Lights Off +5°C to +45°C Lights On	35 ft³ 1000 L	22.6 ft² 2.1 m²	8" 200mm	42"x33"x 80" 1040 x 825 x 2020 (mm)	225 µmoles/m2/s		501 lb 227 Kg
AR Kit	-2°C to +40°C Lights Off +5°C to +45°C Lights On	35 ft³ 1000 L	11.3 ft² 1.05 m²	18" 460mm	42"x33"x 80" 1040 x 825 x 2020 (mm)	500 µmoles/m2/s		281 lb 127 Kg
IN Kit	-2°C to +40°C Lights Off +5°C to +45°C Lights On	35 ft³ 1000 L	22.6 ft² 2.1 m²	10" 250mm	42"x33"x 80" 1040 x 825 x 2020 (mm)	125 µmoles/m2/s		281 lb 127 Kg
PG Kit	-2°C to +40°C Lights Off +5°C to +45°C Lights On	35 ft³ 1000 L	5.65 ft² 0.5 m²	42" 1065mm	42"x33"x 80" 1040 x 825 x 2020 (mm)	700 µmoles/m2/s		281 lb 127 Kg

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## NOTES:

1. REQUIRES MINIMUM OF 2" (51mm) FROM REAR OF CHAMBER TO BACK WALL. \*(REQUIRES 5" (127mm) WITH EXHAUST COLLAR)
2. LENGTH AND WIDTH DIMENSIONS  $\pm 1/4$  (6mm). HEIGHT DIMENSION  $\pm 1$ " (25mm). DO NOT SCALE THE DRAWING.
3. PG KIT; REQUIRES MINIMUM OF 4" (102mm) SPACE BETWEEN CABINETS.

