



PLANT GROWTH CHAMBER
SPECIFICATIONS
& OPTIONS

KEY PRODUCT SPECIFICATIONS

Additional specifications available, contact Conviron

	model	application	Exterior Dimensions W x D x H			volume	growth area	growth height	no. of tiers	temp (°C) lights ON / OFF	light intensity at 25°C (µ)	refrigeration	airflow
REACH-IN CHAMBERS	A1000 PG	Plant Growth	41" 1040 mm	32.5" 825 mm	79" 2005 mm	29.2 ft ³ 826 L	6.1 ft ² 0.57 m ²	42" 1065 mm	1	10 - 45 4 - 40	700	Air Cooled	↑
	A1000 AR	Arabidopsis	41" 1040 mm	32.5" 825 mm	79" 2005 mm	29.2 ft ³ 826 L	11.3 ft ² 1.05 m ²	18" 460 mm	2	10 - 45 4 - 40	500	Air Cooled	→
	A1000 TC	Tissue Culture	41" 1040 mm	32.5" 825 mm	79" 2005 mm	29.2 ft ³ 826 L	22.6 ft ² 2.1 m ²	10" 250 mm	4	10 - 45 4 - 40	225	Air Cooled	↑
	A1000 IN	Incubation	41" 1040 mm	32.5" 825 mm	79" 2005 mm	29.2 ft ³ 826 L	22.6 ft ² 2.1 m ²	10" 250 mm	4	10 - 45 4 - 40	125	Air Cooled	→
	ATC40	Plant Growth / Arabidopsis	100" 2540 mm	35.5" 900 mm	101" 2565 mm	103 ft ³ 2195 L	386 ft ² 3.6 m ²	32" 810 mm	2	10 - 40 4 - 40	500	Water Cooled	→
	ATC60	Plant Growth / Arabidopsis	100" 2540 mm	35.5" 900 mm	101" 2565 mm	103 ft ³ 2195 L	57 ft ² 5.2 m ²	20" 510 mm	3	10 - 40 4 - 40	500	Water Cooled	→
	BDR16	Plant Growth	105" 2675 mm	36" 915 mm	89" 2260 mm	88.5 ft ³ 2500 L	16.2 ft ² 1.5 m ²	65" 1650 mm	1	10 - 40 4 - 40	800	Water Cooled	↓
	E8	Plant Growth	71.25" 1810 mm	29.5" 750 mm	76.25" 1935 mm	32 ft ³ 900 L	8 ft ² 0.74 m ²	46" 1180 mm	1	10 - 45 4 - 45	575	Air Cooled	↑
	E7/2	Plant Growth / Arabidopsis	72" 1830 mm	29.5" 750 mm	78.5" 2000 mm	17 ft ³ 480 L	8.2 ft ² 0.76 m ²	23.5" 605 mm	2	10 - 45 4 - 45	400	Air Cooled	↑
	MTR30	Plant Growth / Arabidopsis	104" 2640 mm	35" 890 mm	78" 1980 mm	31 ft ³ 1880 L	30 ft ² 2.79 m ²	25" 635 mm	2	10 - 45 4 - 45	600	Water Cooled	↑←
	PGR15	Plant Growth	104" 2640 mm	35" 890 mm	78" 1980 mm	78 ft ³ 2220 L	16.1 ft ² 1.5 m ²	57" 1450	1	10 - 45 4 - 45	875	Water Cooled	↑
	PGC20	Plant Growth	100" 2540 mm	35.5" 900 mm	101" 2565 mm	111 ft ³ 3145 L	20 ft ² 1.9 m ²	59" 1500 mm	1	10 - 40 4 - 40	1125	Water Cooled	↑
	PGC Flex 1 tier	Plant Growth / Arabidopsis	100" 2540 mm	35.5" 900 mm	101" 2565 mm	111 ft ³ 3145 L	20 ft ² 1.9 m ²	59.75" 1520 mm	1	10 - 40 4 - 40	1125	Water Cooled	↑
	PGC Flex 2 tier	Plant Growth / Arabidopsis	100" 2540 mm	35.5" 900 mm	101" 2565 mm	111 ft ³ 3145 L	38 ft ² 3.6 m ²	25" 635 mm	2	10 - 40 4 - 40	500	Water Cooled	→
	PGC Flex 3 tier	Plant Growth / Arabidopsis	100" 2540 mm	35.5" 900 mm	101" 2565 mm	111 ft ³ 3145 L	57 ft ² 5.2 m ²	14" 355 mm	3	10 - 40 4 - 40	500	Water Cooled	→
	G1000	Germination / Incubation	45.5" 1155 mm	32.5" 825 mm	79" 2006 mm	29.2 ft ³ 826 L	5.38 ft ² 0.5 m ²	2" 4 cm	Up to 20	4 - 40 on/off	n/a	Air Cooled	→
	S10H	Plant Growth	79.5" 2020 mm	33.25" 845 mm	79" 2006 mm	49 ft ³ 1380 L	10 ft ² 0.93 m ²	59" 1500 mm	1	10 - 45 4 - 40	500	Air Cooled	↑
	TC30	Tissue Culture	104" 2640 mm	35" 890 mm	78" 1980 mm	31 ft ³ 940 L	30 ft ² 2.79 m ²	25" 635 mm	2	10 - 45 4 - 45	200	Air Cooled	↑
	TC80	Tissue Culture	100" 2540 mm	35.5" 900 mm	101" 2565 mm	20 ft ³ 566 L	76 ft ² 7.06 m ²	12" 305 mm	4	10 - 45 4 - 45	200	Water Cooled	↑
	WALK-IN CHAMBERS	BDW40	Plant Growth	120" 3050 mm	70" 1780 mm	114.25" 2900 mm	316 ft ³ 8920 L	40 ft ² 3.7 m ²	95" 2415 mm	1	10 - 40 4 - 40	1100	Water Cooled
BDW80		Plant Growth	120" 3050 mm	133.25" 3385 mm	114.25" 2900 mm	640 ft ³ 18120 L	80.9 ft ² 7.5 m ²	95" 2415 mm	1	10 - 40 4 - 40	1100	Water Cooled	↓
BDW120		Plant Growth	120" 3050 mm	196.25" 4991 mm	114.25" 2900 mm	964 ft ³ 27130 L	121.7 ft ² 11.3 m ²	95" 2415 mm	1	10 - 40 4 - 40	1100	Water Cooled	↓
BDW160		Plant Growth	120" 3050 mm	259.75" 6595 mm	114.25" 2900 mm	1285 ft ³ 36385 L	162.2 ft ² 15.1 m ²	95" 2415 mm	1	10 - 40 4 - 40	1100	Water Cooled	↓
MTPS72		Plant Growth / Arabidopsis	139" 3530 mm	70" 1780 mm	110" 2800 mm	366 ft ³ 10364 L	72 ft ² 6.6 m ²	20" 510 mm	3	15 - 35 10 - 35	275	Water Cooled	←
MTPS144		Plant Growth / Arabidopsis	139" 3530 mm	127.5" 3240 mm	110" 2800 mm	706 ft ³ 19992 L	144 ft ² 13.2 m ²	20" 510 mm	3	15 - 35 10 - 35	275	Water Cooled	←
MTPS216		Plant Growth / Arabidopsis	139" 3530 mm	185" 5285 mm	110" 2800 mm	1045 ft ³ 29590 L	216 ft ² 19.9 m ²	20" 510 mm	3	15 - 35 10 - 35	275	Water Cooled	←
MTPS288		Plant Growth / Arabidopsis	139" 3530 mm	242.5" 6160 mm	110" 2800 mm	1317 ft ³ 37293 L	288 ft ² 26.5 m ²	20" 510 mm	3	15 - 35 10 - 35	275	Water Cooled	←
MTPS360		Plant Growth / Arabidopsis	139" 3530 mm	288.5" 7328 mm	110" 2800 mm	1850 ft ³ 52387 L	360 ft ² 33.1 m ²	20" 510 mm	3	15 - 35 10 - 35	275	Water Cooled	←
MTPS432		Plant Growth / Arabidopsis	139" 3530 mm	346" 8800 mm	110" 2800 mm	1996 ft ³ 56520 L	432 ft ² 39.7 m ²	20" 510 mm	3	15 - 35 10 - 35	275	Water Cooled	←
TCR60		Tissue Culture / Arabidopsis	128" 3240 mm	70" 1780 mm	110" 2800 mm	99 ft ³ 2803 L	60 ft ² 5.6 m ²	20" 510 mm	Various	15 - 40 5 - 40	200	Water Cooled	↑
TCR120		Tissue Culture / Arabidopsis	128" 3240 mm	128" 3240 mm	110" 2800 mm	190 ft ³ 5380 L	120 ft ² 11.2 m ²	20" 510 mm	Various	15 - 40 5 - 40	200	Water Cooled	↑
TCR180		Tissue Culture / Arabidopsis	128" 3240 mm	185" 4700	110" 2800 mm	290 ft ³ 8211 L	180 ft ² 16.7 m ²	20" 510 mm	Various	15 - 40 5 - 40	200	Water Cooled	↑
GR48		Plant Growth	116" 2950 mm	116" 2950 mm	102" 2600 mm	320 ft ³ 9130 L	48 ft ² 4.5 m ²	80" 2030 mm	1	15 - 35 5 - 25	600	Water Cooled	↙↘
GR64		Plant Growth	139" 3530 mm	116" 2950 mm	102" 2600 mm	420 ft ³ 11900 L	64 ft ² 5.9 m ²	80" 2030 mm	1	15 - 35 5 - 25	600	Water Cooled	↙↘
GR96		Plant Growth	116" 2950 mm	208" 5285 mm	102" 2600 mm	640 ft ³ 18120 L	96 ft ² 8.9 m ²	80" 2030 mm	1	15 - 35 5 - 25	600	Water Cooled	↙↘
GR128		Plant Growth	139" 3530 mm	208" 5285 mm	102" 2600 mm	850 ft ³ 23960 L	128 ft ² 11.9 m ²	80" 2030 mm	1	15 - 35 5 - 25	600	Water Cooled	↙↘
GR144		Plant Growth	116" 2950 mm	300" 7620 mm	102" 2600 mm	960 ft ³ 26800 L	144 ft ² 13.5 m ²	80" 2030 mm	1	15 - 35 5 - 25	600	Water Cooled	↙↘
GR192		Plant Growth	139" 3530 mm	300" 7620 mm	102" 2600 mm	1280 ft ³ 36000 L	192 ft ² 18 m ²	80" 2030 mm	1	15 - 35 5 - 25	600	Water Cooled	↙↘
PGW40		Plant Growth	140" 3556 mm	70" 1780 mm	102" 2600 mm	360 ft ³ 10194 L	41.5 ft ² 3.86 m ²	76" 1930 mm	1	10 - 45 4 - 40	1400	Water Cooled	↑

COMMON OPTIONS

Additional accessories and customization available, contact Conviron

• = OPTION S = STANDARD

See back page for descriptions

		A1000-TC	A1000-AR	A1000-IN	A1000-PG	ATC-40	ATC-60	BDR16	E8	E7/2	MTR30	PGR15	PGC20	PGC Flex	G1000	S10H	TC30	TC80	BDW Series	MTPS Series	TCR Series	GR Series	PGW40	
PROGRAMMING	ARGUS	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	AUTOW					•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•
	AUX					•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•
	UPS	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
CONSTRUCTION	EFIS					•	•							•										
	EC	•	•	•	•																			
	FA							S	S	S		S					S		S			S	S	
	GH					•	•	•	•		•	•		•				•	•				•	•
	RECP					•	•	•	S	•	•	S	•	•		•	•	•	•	•	•	•	•	•
	SMC								•	•	•													
LIGHTING	HID							•	•			•							•				•	•
	HL	•		•	•				•	•		•									•	•		
	LMMCL	S	•	•		•	•	•	•	•		•	•	•				•		•	•	•	•	•
TEMPERATURE	FSC	S	S	S	S	S	S						S	S	S			S	S	S		S	•	
	LT	•	•	•	•	•	•	•	•		•	•	•	•						•	•		•	•
	ULT							•				•								•				•
	SDF																							•
REFRIGERATION	ACSC	S	S	S	S	•	•	•	S	S	•	•	•	•	S	S	S	•						
	RAC					•	•	•	•		•	•	•	•			•	•	•	•	•	•	•	•
	OACU					•	•	•				•	•	•				•	•	•	•	•	•	•
	WC	•	•	•	•	S	S	S	•	•	S	S	S	S		•	•	S	S	S	S	S	S	S
	GLY					•	•	•	•		•	•	•	•			•	•	•	•	•	•	•	•
	CPC	•	•	•	•																			
	DXLL																		•					
HUMIDITY	ASNH							•											•	•	•			
	SNH					•	•	•	•	•	•	•	•	•			•	•						•
	USH	S	S	S	S		•	•							S							•		
	BDH							•	•		•	•					•		•					
	CD					•	•					•	•	•				•		•	•	•	•	•
	SCD					•	•						•	•				•		•				
CO ₂	CO2					•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•
	CO2-BP	•	•	•	•										•									
	SCRUB					•	•	•	•		•	•	•	•		•	•	•	•	•	•	•	•	•

PROGRAMMING

ARGUS

Argus Titan control system: designed to provide comprehensive monitoring and equipment automation throughout your facility.

AUTOW

Auto Watering System: hose bib connection controlled by programmable solenoid.

AUX

Auxiliary Circuits: programmable on/off output, provides an auxiliary switch, terminated in the control panel, for timed control of automatic watering, nutrient dosing, etc. Up to four switches available.

UPS

Controller UPS: surge protection and uninterrupted power supply, on controller only, for continuous operation of the controller during power interruptions.

CONSTRUCTION

EFIS

Ebb & Flow Irrigation System: automatic control of irrigation system controlled through the control system.

EC

Exhaust collar: allows connection to central exhaust system, measuring 4" (100mm).

FA

Fresh Air: filtered inlet G3 type, washable, 100 cfm (48 l/s) providing a constant 4x air changes per hour.

GH

Extended growth and exterior heights.

RECP

Electrical Receptacles, Type & Location: wall mounted convenience electrical receptacle within growth area (2 amp allowance).

HEPA (call for availability)

Exhaust HEPA filter: installed to the exhaust outlets made easily accessible for removal.

LIGHTING

HID

High Intensity Discharge: using metal halide and high pressure sodium lamps.

HL

High light Intensity: using fluorescent and halogen incandescent lamps.

LED

Various LED spectrum available allowing for a wide range of intensities. Dimming optional.

LMMCL

Lamps Incorporate Dimming Ballasts: programmable or manual adjustment of light intensity within the programmed range (as low as 5% with fluorescent, 25% with Metal Halide, 30% with High Pressure Sodium and 40% with Ceramic Metal Halide), to maximum intensity. Incandescent lamps are controlled in light levels.

Manual Dimmable Lighting System:

manual adjustment of light intensity within the programmed range as low as 5% with fluorescent lamps, to maximum intensity. (call for availability)

Multi-Tier Operation: multi-tier shelving assemblies provide a maximum light intensity of 500 micromoles/m²/s each. (call for availability)

WCLL

Water-Cooled Lamp Loft: lamp heat removed by a dedicated water cooling coil.

TEMPERATURE

FSC

Circulation Fan Speed Control: programmable or manual fan speed control on conditioning unit, from 50% to maximum.

LT

Low Temperature Operation: enables the chamber to be operated with lights ON to +2°C (No fresh air below 4°C.) A defrost cycle will occur resulting in a temperature increase (spike) for temperatures set below +8°C lights ON/OFF.

ULT

Ultra Low Temperature

Operation: enables the chamber to be operated with lights ON to -10°C (No fresh air below 4°C.) A defrost cycle will occur resulting in a temperature increase (spike) for temperatures set below +8°C lights ON/OFF.

SDF

Sequential Defrost: multiple cooling coils with a sequenced defrost cycle to eliminate the temperature spike experienced with the standard defrost method.

REFRIGERATION

ACSC

Air-Cooled Self-Contained Condensing Unit: cabinet is supplied with an air-cooled, self-contained condensing unit with hot gas bypass system for continuous compressor operation and close temperature control. Condensing unit is located in the machine compartment.

RAC

Remote Outdoor Air-Cooled Condenser: comes complete with all-weather housing, low ambient operation controls and low noise level operation.

OACU

Outdoor Air-Cooled Condensing Unit: containing condenser, compressor, receiver, suction accumulator, control and pressure regulating valves and electrical disconnect.

WC

Water-Cooled Condensing Unit: cabinet is supplied with a water-cooled condensing unit with hot gas bypass system for continuous compressor operation, extended compressor life and close temperature control.

GLY

Chilled Water/Glycol Heating/Cooling: cooling system designed to work with a central chiller refrigeration system.

CPC

Phenolic Coated Refrigeration Coil: the evaporator coil is protected by a phenolic coating that is resistive to the corrosive effects of insect rearing.

DXLL

Refrigerant Cooled Lamp Loft: lamp heat removed by dedicated refrigeration cooling coil.

HUMIDITY

ASNH

Assisted Spray Nozzle Humidification: additive humidity provided by siphon fed, air assisted atomizing spray nozzles. System requires reverse osmosis water.

SNH

Spray Nozzle Humidification: additive humidity through use of spray nozzles.

USH

Ultrasonic Humidification: uses an ultrasonic frequency to turn water into an airborne mist that is forced out into the air to raise humidity.

BDH

Bypass Dehumidification: a precisely controlled volume of chamber air bypasses the heat exchanger by means of a proportionally controlled air damper.

CD

Dehumidification by Chemical Dryer: chamber air is passed over a desiccant to remove moisture.

SCD

Separate Coil Dehumidification: mounted externally, draws air from the growth area through a cooling coil to remove the moisture by condensation.

CARBON DIOXIDE

CO2

CO₂ Additive Control: package includes gas analyzer, CO₂ regulator (NA only), control valve and injection system. CO₂ tank not included.

CO2-BP

CO₂ Additive Back Pack: portable system is mounted on the side of the chamber as a standalone device complete with its own CO₂ process controller.

SCRUB

CO₂ Scrubber: allows for controlling CO₂ concentration levels below resultant conditions. Stand-alone device (floor or roof mounted).



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Management System Certified to ISO 9001

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