

DAIHAN® Plant Growth Chamber, "SWGC", Smart-Lab™ System, 432-/864- Lit. NEW
 with Smart-Lab™ Controller, CFC-Free, 0~12,000- or 15,000-Lux, 30~95% RH, 10~60°C, with Certi. & Traceability



Programmable Plant Growth Chamber "SWGC-1000"

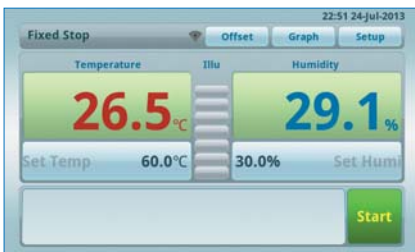
- with Certificate & Traceability :
 Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Suitable for Plant Growth, Stability, Product Self-life QC Testing
- Ergonomic Screen Design 7" Full Touch Screen TFT LCD (Smart-Lab™ Controller)
- WiRe™ App & Web Service. ■ Automatic Data Recording
- Self-Diagnostic Function
- Variable Program Setting for Multiple Patterns with Multiple Segments
- The Recorded Data could be transferred to PC by USB memory
- Controller SW can be upgraded through USB port.
- CE Certified ■ PL (Product Liability) Insurance

- * Inner Tempered Glass Door with Silicone Packing offers easy Observation without Door Opening
- * Humidity Control by Capacitive Humidity Sensor provides Accurate Control from 30 to 95%RH
- * Smart-Lab™ Controller Provides Precise Temperature, Relative Humidity and Illumination Control - Maintain Uniformity and Accuracy of Growth Circumstance
- * 3-/4- Side Light Bank System : Intensity of Light is controlled by 8-levels and Displayed on LCD
- * Over Temperature & Over Current Protection, Sensor Error Detection, Leakage Breaking

Specification

Capacity & Models		432 Lit. "SWGC-450"	864 Lit. "SWGC-1000"
Temp.	Range & Variation	10°C ~ 60°C, ±1°C at 20°C	
	Fluctuation	± 0.5°C at 10°C, ± 0.5°C at 25°C (0% light intensity) ± 1°C at 10°C, ± 1°C at 25°C (100% light intensity)	
Humidity	Range & Variation	30% ~ 95% RH, ±3% at 60°C	
	Fluctuation	±1%	
	Humidifier	Evaporation by Fan with Heater	
Illumination	Range	0 to 12,000 Lux	0 to 15,000 Lux
	Lamp	FPL 55W × 14	FPL 55W × 28
	Bank	3 Side Walls	3 Side Walls & Ceiling
Temp. & Humidity Sensor		Temp. : PT100, Humidity : Capacitive Sensor	
Heat-up Time (up to 37°C)		11 min. (0 % illumination) / 9 min. (100 % illumination)	
Cool-down Time (down to 10°C)		13 min. (0 % illumination) / 15 min. (100 % illumination)	
Temp. Recovery (After Door was opened for 30sec)		3 min. at 10°C, 1 min. at 37°C (0 % illumination) 5 min. at 10°C, 1min. at 37°C (100 % illumination)	
Heating Power /Consumption	for Temp.	1.5 kW	3.0 kW
	for Humi.	1.5 kW	3.0 kW
Compressor		1/2 HP	1 HP
Refrigerant		CFC-Free(R404a) Refrigeration System	
Display		7" Full Touch Screen TFT LCD (Smart-Lab™ Controller)	
Controller		Smart-Lab™ Controller	
Program Function		Temperature and Humidity : 120 Patterns, 1,200 Segments Light Bank : 7 steps	
Door	Internal	Tempered Safety Glass with Silicon Packing	
	External	3-Side Magnetic Packing Door with Light Bank	
Shelves		4 Teflon Coated Steel Shelves	8 Teflon Coated Steel Shelves
Permitted Total Load		64 kg (16kg × 4 Shelves)	128 kg (16kg × 8 Shelves)
Safety Circuit		Over Temp Protector, Over Current & Leakage Breaker	
Material		Internal : Stainless Steel (# 304), External : Power Coated Steel	
Dimension (w × d × h)	Interior (mm)	650 × 700 × 1,050	1,200 × 790 × 1,050
	Exterior (mm)	850 × 1,090 × 1,965	1,400 × 1,150 × 1,965
Packing Size & Gross Weight		1,400 × 1,220 × h2,210mm, 435 kg	1,600 × 1,500 × h2,200mm, 585 kg
Power Consumption		4.8 kW	6.5 kW
Power Supply*		1 Phase AC 120V, 60Hz or AC 230V, 50/60Hz or 3 Phase with Terminal Block	

* Other Specifications are available upon Customer's Request.



Main Display of Smart-Lab™ Controller



Graph Display of Smart-Lab™ Controller



Program Set Display of Smart-Lab™ Controller

<Continued on next page>

Cat. No	Description
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Articles

<Continued from... Programmable Plant Growth Chamber, "WGC" >

Ordering Information

432 Lit. Plant Growth Chamber "SWGC-450", 0~12,000 Lux

- DH.SWGC00450* Plant Growth Chamber, **230V, SWGC-450**, with Terminal Block
- DH.SWGC50450* , **120V, SWGC-450**, with Terminal Block
- DH.SWGC60450* , **3 Phase, SWGC-450**, with Terminal Block

864 Lit. Plant Growth Chamber "SWGC-1000", 0~15,000 Lux

- DH.SWGC01000* Plant Growth Chamber, **230V, SWGC-1000**, with Terminal Block
- DH.SWGC51000* , **120V, SWGC-1000**, with Terminal Block
- DH.SWGC61000* , **3 Phase, SWGC-1000**, with Terminal Block

* -marks : Included Water Tank(with Silicon Tube) and Lux Meter

Spare Wire Shelves, Teflon Coated Steel

- DH.WGC10450 (1) Wire Shelf, Teflon Coated, w640×d620mm, "GCS450", for **WGC-450**
- DH.WGC11000 , w580×d620mm, "GCS1000", for **WGC-1000**

Validation (IQ, OQ) Service

- DH.WGC30450 Validation Service(IQ, OQ), **GCV450**, for **WGC-450**
- DH.WGC31000 , **GCV1000**, for **WGC-1000**



Programmable Plant Growth Chamber "WGC-450"

» DAIHAN WiRe™ App & Web Service



7" Full Touch Screen TFT LCD (Smart-Lab™ Controller)

It is possible to monitor and control the Smart-Lab™ equipment through all smart phone, tablet and web without restraint of time and place.



WiRe™ App & Web Service



(1) Wire Shelves, Teflon Coated Steel (Included)



Water Tank/Silicon Tube/Lux Meter (Included)

※ Smart-Lab™ System Refer to Page. P 8 ~P 13