

ORBITEK[®]
Range of Bio-equipment

CELEBRATING
25
YEARS OF TRUST

ORBITEK[®]
Range of Bio-equipment



📍 **Address for Communication**
2/605, East Coast Road, Neelankarai,
Chennai 600 115.

✉ sales@scigenicsbiotech.com

📍 **Registered Office**
35 (18), Vasudevapuram, Triplicane,
Chennai 600 005.

✉ service@scigenicsbiotech.com

Customer Support : +91-9790939608/02
Service Support : +91-9790939603/12

www.scigenicsbiotech.com



SCIGENICS BIOTECH
PRIVATE LIMITED

**PLANT GROWTH
CHAMBER**

www.scigenicsbiotech.com

From the trusted brand among user scientists, now **ORBITEK**® GC Plant Growth Chambers are available with a lot of innovative features.

ORBITEK® GC meets wide-ranging requirements in plant growth and related research.

Versatile

⊕ **ORBITEK**® GC Plant Growth Chambers with adjustable & slide out Shelving Arrangements, Gentle Air Flow, Precisely Controlled Humidity make the Chamber Ideal for Plant Growth, Arabidopsis, Tissue Culture Studies.

⊕ **ORBITEK**® GC Plant Growth Chambers are Robust & User Friendly.

Construction

- ⊕ Mat-finished stainless steel interior and MS Powder coated exterior
- ⊕ High grade thick insulation ensures these chambers perform well under extreme climatic conditions
- ⊕ Isolated shelving arrangements below light canopy ensures that the heat emitted from light source is not transferred to the plants



Air-Flow Pattern

- ⊕ Distributed Air Handling System (DAHS) effectively circulates the air gently, which is important for Plant growth.
- ⊕ The energy efficient air circulation system mounted on the rear wall of the inner chamber ensures effective air circulation.

Temperature & Humidity

- ⊕ Finned Stainless Steel heaters ensure effective heat transfer and withstand higher humidity levels assuring long life of heaters.
- ⊕ The Refrigeration system comprises thermal expansion valve (TEV) and hot gas bypass for efficient performance.
- ⊕ Hermetically sealed reciprocal compressor with eco-friendly CFC free refrigerant.
- ⊕ Ultrasonic humidifier with water reservoir for minimal water consumption and heat generation.

Controls & Operation

- ⊕ User friendly touch sensitive operation through HMI (Human Machine Interface).
- ⊕ PLC controlled parameters for intelligent operation.
- ⊕ Large 7 inch colour LCD display to monitor set parameters.
- ⊕ Data Logging facility.

Safety Features

- ⊕ Limit Switch Pressure to Protect Compressor.
- ⊕ Thermostat for High Temperature Protection.
- ⊕ IP65 Protection for Circulation Fans.
- ⊕ RCCB/MCB for Over Current Protection for user Safety.
- ⊕ Non-Volatile Memory with Automatic Power Failure Restart.

Specification

ORBITEK® GC – 350L

Cabinet External	MS Powder Coated
Cabinet Internal	Stainless Steel SS304
Internal Dimension (mm)	W720 x D 500 x H 1140
Volume in Litres	350L
No. of Shelves	3
Growth area/Shelf	0.3 m.sq
Total Growth area	0.9 m.sq
Max.Growing height (cm)	24
Temp. range/lights ON	15 to 40 deg C
Temp.range/lights OFF	5 to 60 deg C
Temp.Accuracy	± 0.5°C
Humidity range / lights ON	50 to 85% RH (+15°C to 40°C)
Humidity range/ lights OFF	50 to 85% RH (+15°C to 40°C)
Humidity Accuracy	±5% RH
Air Flow Pattern	Forced air circulation
Light Bank	LED
Light intensity	7000 lux ± 10%
Insulation	Fiber Glass Wool
Power requirements	16A,230V,50Hz, Single phase
Power consumption	2500W (max)
Refrigeration	CFC free R134a Refrigerant
Optional UV lamp	Yes
Heater Power	50W