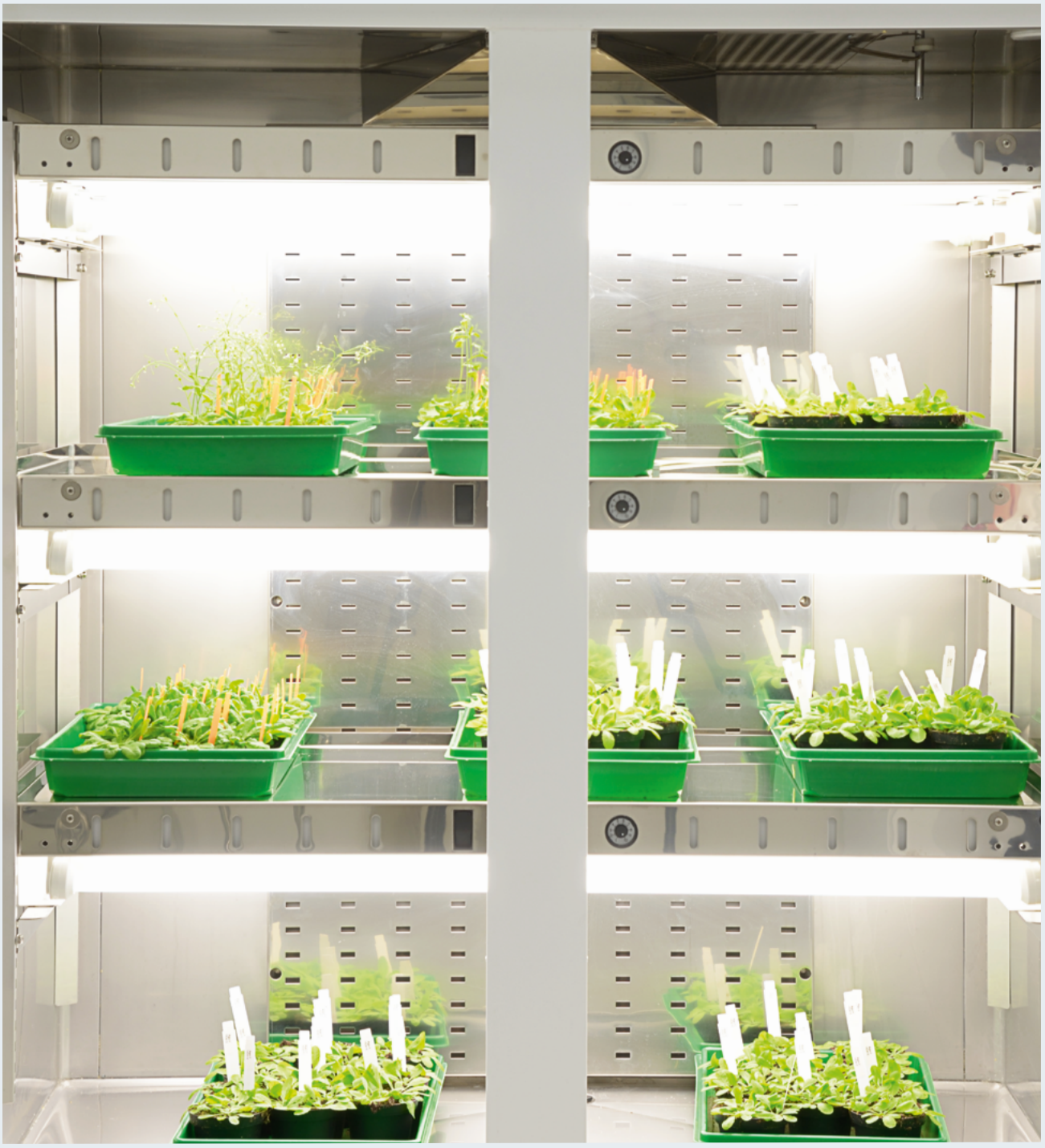
weisstechnik®
a schunk company

fitotron

SGC 120 Biological Chambers

Bringing nature into the laboratory.

All models have a simple user-friendly control as well as numerous setting options.



fitotron® SGC 120 Biological Chambers

The fitotron® SGC 120 Range combines high quality, versatility and user friendliness. Controlled environments for plant research.

Reproducible, constant and uniform conditions for temperature, humidity and light are crucial for the quality of experiments. **fitotron®** SGC 120 Biological Chambers fulfil these requirements and also provide a high level of flexibility in changing test conditions.

The user defines a variety of self-programmed options via a colour touchscreen panel. Temperature and humidity can be set at the touch of an icon as well as the day and night time. The conditions of the chamber can be displayed graphically. Additionally, USB and Ethernet-connections are provided.

fitotron® SGC 120 Plant growth chamber
It provides access to most of the worldwide climatic conditions, without the influence of natural variation.

- Up to 5 lamp trays
- Individually dimmable lamp trays
- Growing area up to 3.40 m^2
- Max. growing height: 1330 mm
- Humidity control 35 % – 80 % RH

fitotron® SGC 120 Arabidopsis Chamber
The design allows unlimited access for measurements on tightly bundled leaves. The chamber provides space as well as controlled light, temperature and humidity conditions for the Arabidopsis complete life cycle through to maturity.

- 3 lamp trays
- Individually dimmable lamp trays
- Growth area 2.04 m^2
- Standard growth height 310 mm
- Humidity control 35 % – 80 % RH

fitotron® SGC120 Insect Incubation Chamber
Fruit flies, bees and other insects can be studied in a controlled environment. Lamp trays have dimmable high frequency fluorescent lamps minimising any stroboscopic stress.

- 4 lamp trays as standard
- Individually dimmable lamp trays
- Insect-friendly lighting
- Humidity control 35 % – 80 % RH
- Shelf area 2.71 m^2

Apart from the preconfigured models we also offer a wide range of customisation. Light trays can easily be removed or added. You can also choose from various lighting options.

fitotron® SGC 120 Tissue Culture Chamber
This chamber provides a generous tray area, including detachable spacers that can be used to prevent condensation on the petri-dish cap.

- 5 lamp trays
- Individually dimmable trays
- Tray spacers
- Humidity control 35 % – 80 % RH
- Tray area 3.40 m²

fitotron® SGC 120 Seed Storage Chamber
Perfectly suited for the simulation of cool, dry conditions.

- 5 wire trays (more possible)
- Air-drying system for control of air humidity down to 15 % at 4 °C
- Tray area 3.40 m²
- Suitable for both medium and long-term seed storage

fitotron® SGC 120 Constant Temperature Chamber
Constant climatic conditions are created in this chamber for the storage of biological material, media and plant tissue. It is also perfectly suitable for incubation and conditioning.

- 5 wire trays (more possible)
- Optional humidity control 35 % – 80 % RH
- Tray area 3.40 m²

fitotron® SGC 120 LED
Available as a preconfigured system with two LED-trays. Single lamp trays can also be used with all models. Two different LED-tray types are available.

- 2 LED-light trays as standard
- Growing area 1.36 m²
- Humidity control 35 % – 80 % RH
- Two different LED tray types

Technical Data of the **fitotron®** SGC 120 Range

Dimensions (w x d x h in mm)	Interior	1320 x 675 x 1410
	Exterior	1440 x 810 x 1981
	Working volume	1200 litre
Temperature range	-2 °C to +40 °C (lights off) +5 °C to +40 °C (lights on) Seed storage: +4 °C Actual temperature range may vary according to configuration	
Temperature fluctuation with time	+/-0.3 °C	
Humidity control (where fitted)	35%RH - 80%RH (lights off), 35%RH - 75%RH (lights on) temperature dependent Measurement by capactive humidity sensor including control of both humidification and de-humidification	
Standard tray configuration	Constant temperature	5 wire trays
	Arabidopsis	3 lamp trays
	Plant growth	Up to 5 lamp trays
	Insect incubation	4 lamp trays
	Tissue culture	5 lamp trays
	Seed storage	5 wire trays
Configuration of the fluorescent lamp trays		
1 lamp tray	12 x 36 W fluorescent lamps Maximum intensity approximately 620 µmol m^{-2} s^{-1} measured 150 mm beneath the light at 25 °C Maximum height between the trays 1185 mm Total tray area 0.68 m^2	
2 lamp trays	6 x 36 W fluorescent lamps per tray Maximum intensity approximately 290 µmol m^{-2} s^{-1} measured 150 mm beneath the light at 25 °C Maximum height between the trays 530 mm Total tray area: 1.36 m^2	
3 lamp trays	4 x 36 W fluorescent lamps per tray Maximum intensity approximately 170 µmol m^{-2} s^{-1} measured 150 mm beneath the light at 25 °C Maximum height between the trays 310 mm Total tray area: 2.03 m^2	
4 lamp trays	3 x 36 W fluorescent lamps per tray Maximum intensity approximately 140 µmol m^{-2} s^{-1} measured 150 mm beneath the light at 25 °C Maximum height between the trays 205 mm Total tray area: 2.71 m^2	
5 lamp trays	2 x 36 W fluorescent lamps per tray Maximum intensity approximately 100 µmol m^{-2} s^{-1} measured 150 mm beneath the light at 25 °C Maximum height between the trays 130 mm Total tray area 3.39 m^2	
Safety	Adjustable safety thermostat independent from the controller, with min/max temperature limits for acoustic and visual alarm display. Potential-free alarm contact.	
Construction	Interior	Corrosion resistant, stainless steel
	Exterior	Zinc protected steel with a painted textured finish
Electrical requirement	230V + 10% -6% 1 phase 50/60 Hz	
Water requirement	Demineralised water (humidity option only)	
Options available	CO_2 control, LED-light trays, additional single wire trays and light trays, access ports, water cooling S!MPATI software, high ambient, additional alarms	

Passionately innovative.

We work in partnership to support companies in research, development, production and quality assurance, with 22 companies in 15 countries at 40 locations.

weisstechnik
Test it. Heat it. Cool it.

Environmental simulation

The first choice for engineers and researchers for innovative, safe environmental simulation facilities. In fast motion, our test systems can simulate all the influences in the world and even in space. In temperature, climate, corrosive, dust or combined stress testing with its very high degree of reproducibility and precision.

Air-conditioning technology, air dehumidification, cleanrooms

As the leading provider of cleanrooms, air-conditioning technology and air dehumidification, we consistently ensure optimal ambient conditions for people and machines. For industrial production processes, in hospitals, mobile operating tents or in the field of information and telecommunications technology. From project planning to implementation.

Heating technology

Experienced engineers and designers develop, plan and produce high-quality, reliable heating technology systems for a broad range of uses from heating and drying cabinets and microwave systems through to industrial furnaces.

Clean air and containment systems

With decades of experience and know-how, we guarantee the most sophisticated clean air and containment solutions. Our comprehensive and innovative range of products includes barrier systems, laminar flow systems, safety workbenches, isolators and airlock gate systems.

Weiss Technik UK Ltd
Loughborough Technology Centre
Epinal Way
Loughborough
LE11 3GE/United Kingdom
Phone +44 1509 631590
enquiries.gb@weiss-technik.com
www.weiss-uk.com

UT-Bio-SGC120-01.1E/PP 1.0/05 2018