“WALK IN” PLANT GROWTH CHAMBER

Perfect solution for botanical and agricultural applications, plant pathology, plant tissue culture studies, seed germination studies, plant genetic research...

- Custom sizes according to user requirements
- Easy to use fully programmable controller
- State of the art repeatability
- Day light simulation control
- Relative humidity control
- Temperature control
- CO2 control (option)
- PC compatibility

Kambič

Chamber equipment: Specially designed racks with height adjustable shelves and bottom installed lights

Tailored equipment available

Compressor based refrigeration system.

External unite mounted on the top of the chamber or remote location

PLC based controller. Simple and effective programming of all day and night simulation conditions. SW pack for PC available

Backup unite (optional)

Optional system for CO2 control

Door observation window

Electronics compartment

Mounted on the chamber or remote location

Sealed and extensively heat insulated door

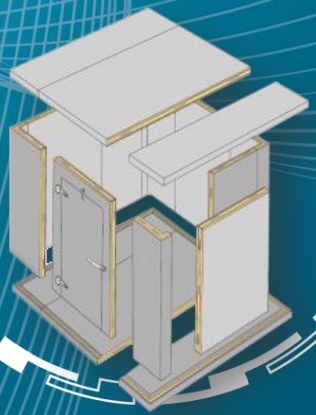
Access port with both end plugs Ø40, Ø50 or Ø90

Heavy duty closing mechanism with safety unlocking system from interior

Extensive heat insulation.

Various insulation panel thicknesses.

Modular chamber design from insulation panels



Fully stainless steel interior.

Exterior powder coated RAL 9010 (other colors available on request)

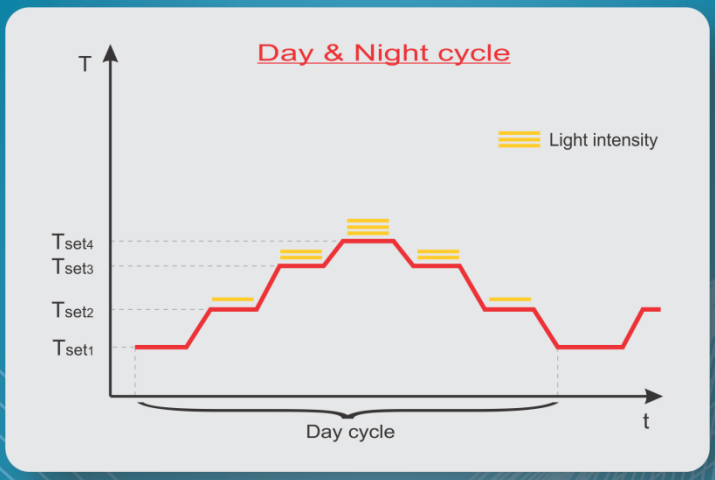
Controller functions:

24 hour day & night cycle control:

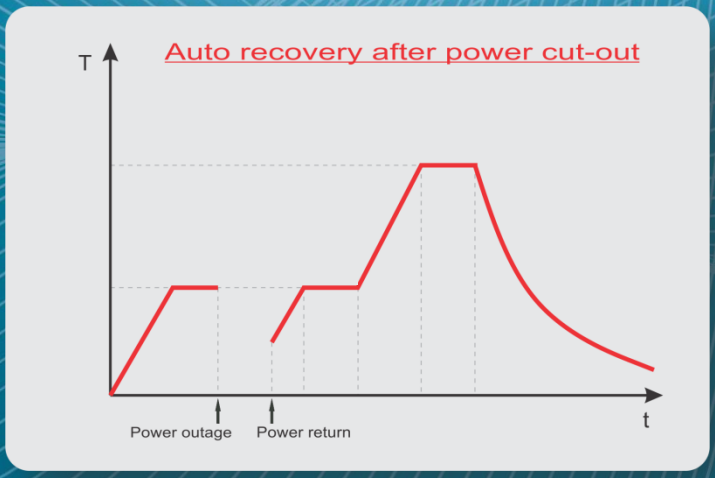
24 hours (one day) can be divided into five phases of day and five phases of night!

Example:

- Phase 1 (day): 07:00 to 10:00, T = 15°C, Rh = 70%, light intensity 1
- Phase 2 (day): 10:00 to 18:00, T = 30°C, Rh = 80%, light intensity 3
- Phase 3 (day): 18:00 to 21:00, T = 23°C, Rh = 75%, light intensity 2
- …..
- Phase 1 (night): 21:00 to 01:00, T = 20°C, Rh = 70%, no lights
- Phase 2 (night): 01:00 to 05:00, T = 18°C, Rh = 73%, no lights
- Phase 3 (night): 05:00 to 07:00, T = 19°C, Rh = 75%, no lights
- …..



Auto recovery after power cut-out:



Technical data:

	Walk in Plant Growth Chamber
	
External dimensions (WxHxD) in mm	According to user preferences
Temperature range (°C) (lights on or off)	-20…+60
Rh range (%)	40…95
Temperature & Rh display resolution	0.1°C / 1%
Temperature set resolution (°C)	0.1
Rh set resolution (%)	1
Temperature stability (°C) (lights off)	Better than ±0,3
Temperature uniformity (°C) (lights off)	< ± 1 @ +37°C
Rh Stability (%) (lights off)	Better than ±3
Day light simulation	FLUORA lights (LED as an option)
Illumination intensity	1/3, 2/3, 3/3
Temperature Control	PID
Cooling	Air cooled compressor aggregate
Relative humidity	Steam generator / Ultrasonic humidifier / DEW point
Power supply	3x400 V 50/60 Hz (± 10%)
Access ports (mm)	Ø 40 standard, (Ø 50, Ø 90 as an accessory)
Interface	RS 232 (USB or Ethernet as an optional)

Accessories:

Description	Part no.
Evaluation report	1719
Monitoring and data collection software for PC	104
USB interface	1466
Ethernet interface	1716
Password protection	1718
CO2 control system	2108

Design solutions:

Incorporation in to a Clean Room:

Open room installation:

Outside installation:

Portable:
(Incorporated in to 20ft or 40ft ship container)