



TOTAL CONTROL AT YOUR FINGER-TIPS!



bronson

CLIMATE BV

INCREMENTUM 1400

The Incrementum 1400 cabinet fulfils your general requirements with regards to temperature, humidity and light. This multi-tier reach-in is designed to give you reliable and accurate control for your research.

The Incrementum 1400 can be used for a broad range of research & test applications: Plant Growth, Tissue Culture, Enviromental testing, Stress testing, Seed Germination, Insect-breeding, Product testing, long-term storage & various applications for life sciences.



ENVIRONMENTAL RESEARCH

The Bronson Incrementum 1400
Multi tier reach-in

Every researcher looks for reproducibility, stability control and efficiency in his work. The cabinets from Bronson Climate meet all these criteria. The cabinets have been designed and developed based on many years of experience to create very reliable and exceptionally flexible products.

With the Bronson Incrementum 1400, you can create a wide range of climate conditions in one reach-in.

Bronson cabinets go one step further. The Bronson product range is able to deliver the desired climate including temperature, relative humidity and CO₂ at any moment and at any institution. It's all in your hands!

Ultimate Climate Control thanks to our expertise.



ENVIRONMENTAL RESEARCH



The Bronson Incrementum 1400 is a multi-tier cabinet with a flexible shelving system to maximise the required growth height from 150mm up to ± 1200 mm.

Max grow height:

- 1 layer ± 1200 mm.
- 2 layers ± 600 mm.
- 3 layers ± 350 mm.
- 4 layers ± 200 mm.



Benefits of the cabinet:

- White coating for good reflection
- Shelves are made of stainless steel
- Shelves are adjustable in height
- Shelves are removeable (plug and play)
- Surface is easy to clean
- Removable backwall for cleaning
- No center column 1300mm wide clearance
- Double door design
- Doorlock and door switch



TECHNICAL SPECIFICATIONS 1400

GENERAL:

| | |
|------------------------------------|--|
| Volume | 1247 Litre |
| External dimensions (W x D x H mm) | 1470 x 825 x 2000 |
| Internal dimensions (W x D x H mm) | 1320 x 680 x 1390 |
| Exterior & interior | White coated steel |
| Shelves | Stainless steel |
| Number of doors | 2 |
| Keylock | Yes |
| Shelf size (mm) | ± 1300x610 |
| Number of growth layers | 1 up to 4 |
| Growth surface per layer | 1 layer =0.80m ² 2 layers =1.60m ² 3 layers =2.40m ² 4 layers =3.20m ² |
| Capacity 600x400mm plant trays | Up to 12 (3 per shelf) |
| Growth height | Adjustable from 150mm up to ± 1200mm |
| Chassis | On four wheels |

| TEMPERATURE | LIGHTS ON | LIGHTS OFF |
|---|----------------|---------------|
| Temperature range | +10°C to +40°C | +5°C to +40°C |
| Night frost simulation up to 6 hours ⁽¹⁾ | - | - |
| Temperature precision controller | 0,1°C | 0,1°C |
| Temperature variation | < ± 0,3°C | < ± 0,2°C |
| Temperature uniformity per shelf | < ± 2,0°C | < ± 0,5°C |

| HUMIDITY ^{(1) (2)} | LIGHTS ON | LIGHTS OFF |
|---------------------------------|--------------|--------------|
| Humidity range at +5°C to +40°C | 50 to 80% RH | 50 to 80% RH |
| Humidity precision controller | 1% RH | 1% RH |
| Humidity variation | ± 5% RH | ± 2% RH |
| Humidity uniformity per shelf | ± 7% RH | ± 5% RH |

| LIGHT INTENSITY LED ⁽³⁾ | NUMBER OF SHELVES |
|---|-------------------|
| Up to 400 µmol/m ² /s (PPFD) at 150mm | 4 |
| Up to 600 µmol/m ² /s (PPFD) at 150mm | 2 |
| Up to 1000 µmol/m ² /s (PPFD) at 150mm | 1 |
| Up to 1500 µmol/m ² /s (PPFD) at 150mm | - |

| TECHNICAL DATA | |
|--------------------------------|--|
| PLC Controller | Siemens S7-1200 controller |
| Touchscreen | Siemens SIMATIC Unified 7 inch comfort panel |
| Temperature sensor | PT1000 |
| Humidity sensor ⁽¹⁾ | Hygrometric |
| Airflow | Horizontal; ± 0,3 m/s |
| Humidifier ⁽¹⁾ | Ultrasonic |
| Dryer ⁽¹⁾ | Dehumidification by cooling coil |
| CO ₂ ⁽¹⁾ | 50-5000 ppm |

| INSTALLATION REQUIREMENTS | |
|---|--|
| Location | Clean airconditioned room controlled between the 10°C and 25°C |
| Water (for optional humidifier) | Demineralized or RO water 1-5 bar |
| Drain | Drain at floor level near the cabinet |
| Weight | ± 250 Kg. (depending on configuration) |
| Electrical connection | 1 Phase 16A type C 230V 50Hz (0,6 - 3,0 kW depending on configuration) |
| Connection | Potential alarm contact / internet UTP |
| Compressed air (for optional air dryer or CO ₂ scrubber) | 6-12 bar |

(1) Optional

(2) Depending on heat load and moisture content inside and outside the cabinet

(3) There are different light intensities available, the maximum light intensity depends on the number of shelves and heatload



www.bronsonclimate.nl



Distributor:

**Bronson Climate b.v.
Valeton 19
5301 LW
Zaltbommel
The Netherlands**

**0031 418 760 310
CLIMATE@BRONSON.NL**



Bronson Climate Grows