



**Best Technology**  
For Your Laboratory

**SMART LABORATORY DRYING OVEN  
WITH FORCED AIR CIRCULATION  
S CLASS**

# SMART LABORATORY DRYING OVEN WITH FORCED AIR CIRCULATION S CLASS

BF120S



## Overview | BF120S

FG laboratory drying ovens have various features, including high precision, repeatability, temperature uniformity, and a wide temperature range (up to 300°C). They are suitable and reliable for temperature control and drying materials in scientific, research, and industrial laboratories.

With their ability to connect to the internet in the cloud space, S-class laboratory ovens provide users with the easiest and most convenient way to monitor and analyze extensive data from any location worldwide.

The BF120S is a 120-Liter forced-air circulation smart laboratory drying oven.

## Main features | BF120S

Inner chamber and Heater element container made of stainless steel

The heater element embedded by stainless steel shield

External Case Coated with electrostatic powder paint

Circulation fan system with air channel

Temperature Wide range up to 300°C

Equipped with Error Alarm

High energy efficiency

PT100 sensor

## Special benefits | BF120S

### HCT (Homogeneous chamber technology)

Temperature stability and reproducibility

Uniformity @ 27 points of chamber

Triple-walled chamber

Fast recovery time

### DUAL SAFETY

Class 3.1 independent temperature safety device (DIN12880)

Visual and audible temperature alarm

2 PT100 sensors

### S class controller

The new generation of smart timer is adjustable up to 999 hours and permanent work capability

A wide range of options for programming and documentation using interfaces, integrated data logger, and FG SMART MONITOR Software

All parameters are stored in internal memory for up to 1 year

All parameters are logged even in case of power failure

More stability thanks to the fuzzy controller

Setting all parameters online/offline

Connect to internet with Wi-Fi

ARM series microcontroller

User-friendly calibration

Various temp alarm

Open door alarm

USB port

## Special benefits | BF120S

### FG SMART MONITOR

Multiplatform application (Android, Linux, IOS, windows, macOS, chromium and ...)

Programming, managing & transferring data by USB flash

Various reports with graphs and tables in pdf/excel format

**Unlimited programs**, each program up to 100 steps

Weekly, monthly **automatic report** by email

Online controller display lock/unlock

Reports according to **GMP /GLP**

User friendly **online calibration**

Online monitoring and alarms

Temperature ramp setting

**SMS/email notification**

weekly program

### Inner chamber

Silicon tape around the door resistant to temperatures of up to 320°C

Easy access to the element container for cleaning

Easy loading and unloading of specimen material

Circulation fan system with air channel

2 chrome -plated racks included

Fully stainless-steel chamber

Adjustable height of shelves

Rack with tilt protection

Easy cleaning

## Special benefits | BF120S

### Outer body

Air exchange rates and air flap position electronically controllable

Pre-heated fresh air prevents temperature fluctuations

Very tight door closure with 2-points door latch

Beautiful and ergonomic design

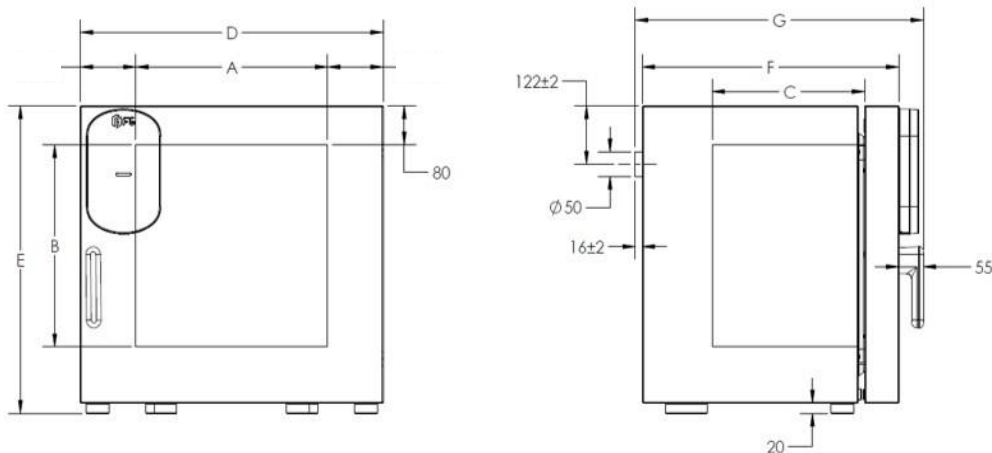
### Service and guaranty

10-years after-sales service

5-years heater warranty

2-years guaranty

## Specification | BF120S



### Exterior dimensions

|   |      |
|---|------|
| Wall clearance, side (cm)                         | 16   |
| Wall clearance, rear (cm)                         | 10   |
| Exhaust duct (outer Ø cm)                         | 5    |
| Depth Plus door handle and controller (cm) (G)    | 73   |
| Depth without door handle and controller (cm) (F) | 67.5 |
| Height (incl. feet) (cm) (E)                      | 68   |
| Width (cm) (D)                                    | 82.5 |
| Weight (empty) (kg)                               | 62   |
| Number of doors (ea.)                             | 1    |

### Interior dimensions

|                             |       |
|-----------------------------|-------|
| Interior volume (l)         | 120   |
| Height (cm) (B)             | 46    |
| Width (cm) (A)              | 59    |
| Depth (cm) (C)              | 44.5  |
| Permitted total load (kg)   | 100   |
| Load per rack (kg)          | 30    |
| Racks number standard (max) | 2 (5) |
| Circulation fan             | Yes   |

## Specification | BF120S

### Temperature data

|   |      |
|---|------|
| Temperature range approx. 15 °C above ambient temperature to (°C) | 300  |
| Display accuracy (deviation) @ 60°C (±K)                          | ±0.1 |
| Display accuracy (deviation) @ 150°C (±K)                         | ±0.2 |
| Temperature fluctuation @ 60°C (±K)                               | ±0.2 |
| Temperature fluctuation @ 150°C (±K)                              | ±0.5 |
| Setting temperature accuracy                                      | ±0.1 |

### Uniformity @ 27 points of chamber (variation)

|              |      |
|--------------|------|
| @ 60°C (±k)  | ±1.0 |
| @ 150°C (±k) | ±3.0 |

### Heating-up time \*

|                                |    |
|--------------------------------|----|
| Heating up time to 60°C (min)  | 30 |
| Heating up time to 150°C (min) | 35 |

### Recovery time after doors were open for 30 sec \*

|               |    |
|---------------|----|
| @ 60°C (min)  | 5  |
| @ 150°C (min) | 10 |



## Specification | BF120S

### Air exchange

|               |      |
|---------------|------|
| @ 60°C (x/h)  | 10±5 |
| @ 150°C (x/h) | 25±5 |

### Electrical data

|                |   |
|----------------|---|
| Power (W)      | 1600                                      |
| Frequency (HZ) | 50  |
| Voltage (V AC) | 220                                       |
| Current (A)    | 7.2                                       |
| Power type     | single phase                              |
| Plug type      | CEE 7/7 plug<br>(compatible with E and F) |

### Electric energy consumption

|                |     |
|----------------|-----|
| @ 60°C (Wh/h)  | 145 |
| @ 150°C (Wh/h) | 460 |

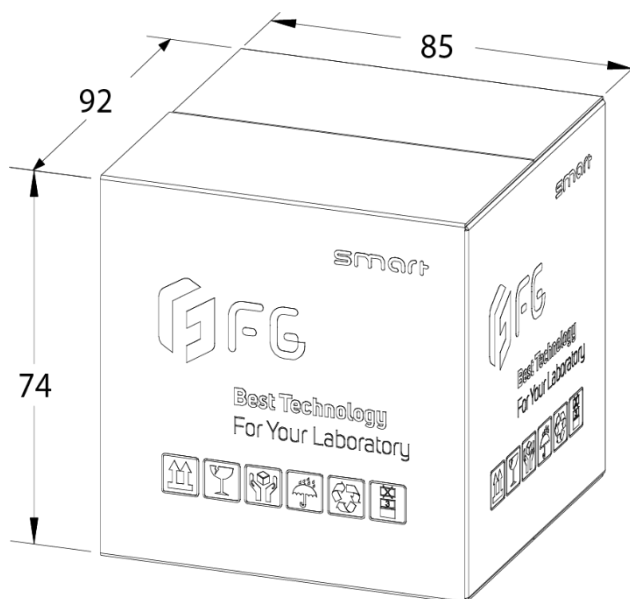
## Specification | BF120S

### Packing/ shipping data

| Transport information                               | Device Must be transported upright |
|---|------------------------------------|
| Width incl carton (CM) approx.                      | 85                                 |
| Height incl carton & pallet underneath (CM) approx. | 74                                 |
| Depth incl carton (CM) approx.                      | 92                                 |
| Packing Material                                    | Carton                             |
| Gross weight with packing (KG) approx.              | 70                                 |

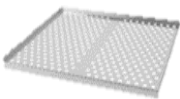
\* To 98% of the set value

- All technical data are specified for units with standard equipment at an ambient temperature of 25 °C and a line voltage fluctuation of  $\pm 10\%$ .
- FG reserves the right to change technical specifications at any time.



# Options and accessories |BF120S

Additional stainless-steel rack



Access port with silicone plug



Metal-framed glass doors



Qualification folder IQ/OQ/PQ



Calibration certificate



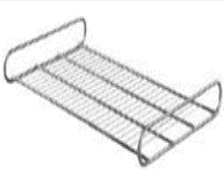
Interior lighting



External sensor



Rack



Door lock





Email: [global@fginst.com](mailto:global@fginst.com)

Website: [www.fginst.com](http://www.fginst.com)