

**Best Technology** For Your Laboratory

SMART LABORATORY DRYING OVEN WITH NATURAL CIRCULATION S CLASS



# SMART LABORATORY DRYING OVEN WITH NATURAL CIRCULATION S CLASS

**BM120S** 



Factory: Shemshad St, Saei Blvd, Nazarabad Industrial estate at 75th Km of Tehran-Qazvin highway, Alborz, Iran

Head office: No.801, Soheil tower, Jomhouri square, Navvab highway, Tehran, Iran

### Overview | BM120S

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 BM12OS is a 120-Liter natural air circulation smart laboratory drying oven.

## Main features | BM120S

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 Temperature Wide range up to 300°c Equipped with Error Alarm High energy efficiency PT100 sensor

### 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

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### Special benefits | BM120S

#### **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 330°C

Easy access to the element container for cleaning

Easy loading and unloading of specimen material

2 chrome -plated racks included

Fully stainless-steel chamber

Adjustable height of shelves

Rack with tilt protection

Easy cleaning





#### **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

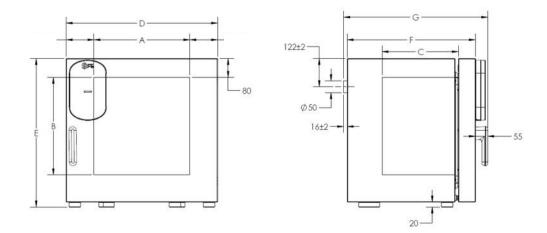
Service and guaranty

10-years after-sales service

5-years heater warranty

2-years guaranty

# Specification | BM120S



### **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)	55
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)	25
Load per rack (kg)	5
Racks number standard (max)	2 (5)
Circulation fan	No

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# Specification | BM120S

#### Temperature data

Temperature range approx. 15 °C above ambient temperature to (°C)	300
Display accuracy (deviation) (±K)	±0.2
Temperature fluctuation @ 80 °C (±K)	±0.5
Temperature fluctuation @ 150 °C (±K)	±1

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

@ 80 °C (±k)	±2.5
@ 150 °C (±k)	±3

### Heating-up time \*

heating up time to 70 °C (min)	25
heating up time to 150 °C (min)	35
heating up time to 300 °C (min)	70

### Specification | BM120S

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

@ 70 °C (min)	10
@ 150 °C (min)	15
@ 300 °C (min)	25

#### **Electrical data**

Power (W)	1500
Frequency (HZ)	50
Voltage (V AC)	220
Current (A)	6.8
Power type	single phase

\* 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  $\pm 10\%$ .

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### Options and accessories |BM120S

Additional stainless-steel rack ===== Ø Access port with silicone plug Metal-framed glass doors **(**) FG Qualification folder IQ/OQ/PQ 14144 Calibration certificate Interior lighting External sensor Rack Door lock

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