FG

Best Technology
For Your Laboratory

SMART HOT INCUBATOR
WITH NATURAL CONVECTION
S CLASS

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CM120S

Overview | CM120S

FG Incubators are equipped with various features, including high precision, repeatability, and temperature uniformity, making them suitable and reliable for the growth of microorganisms and creating a constant temperature environment in scientific, research, and industrial laboratories.

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

The CM120S is a 120-Liter natural convection smart incubator.

Main features | CM120S

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

Inner door made of tempered safety glass

Equipped with Error Alarm

High energy efficiency

PT100 sensor

Special benefits | CM120S

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 Software FG SMART MONITOR

All parameters are stored in internal memory up to 1 year

All parameters 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 | CM120S

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 | CM120S

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
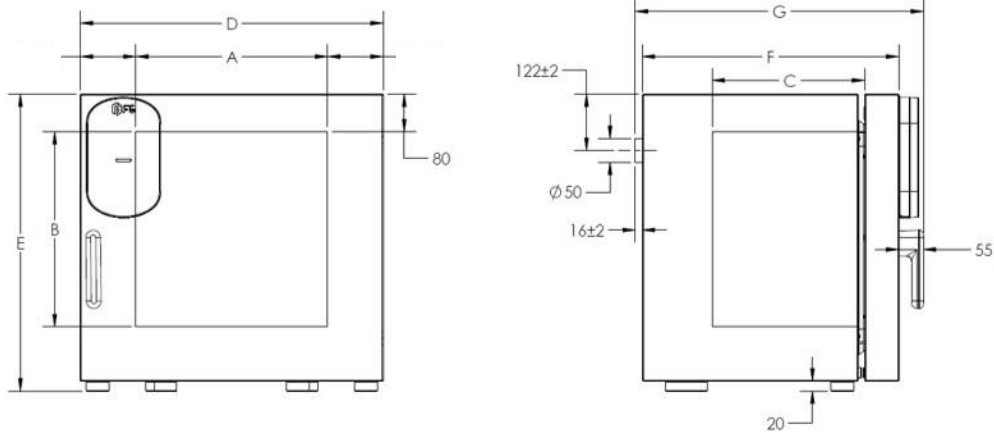
Beautiful and ergonomic design

Service and guaranty

10-years after-sales service

5-years heater warranty

2-years guaranty

Specification | CM120S

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)	61
Number of doors (ea.)	1
Number of interior glass doors (ea.)	1

Interior dimensions

Interior volume (l)	114
Height (cm) (B)	46
Width (cm) (A)	59
Depth (cm) (C)	42
Permitted total load (kg)	100
Load per rack (kg)	30
Racks number standard (max)	2 (5)
Circulation fan	No

Specification | CM120S

Temperature data

Temperature range approx. 5 °C above ambient temperature to (°C)	80°C
Display accuracy (deviation) @ 37°C (±K)	±0.1
Display accuracy (deviation) @ 55°C (±K)	±0.1
Display accuracy (deviation) @ 70°C (±K)	±0.1
Temperature fluctuation @ 37°C (±K)	±0.2
Temperature fluctuation @ 55°C (±K)	±0.2
Temperature fluctuation @ 70°C (±K)	±0.2
Setting temperature accuracy	±0.1

Uniformity @ 27 points of chamber (variation)

@ 37°C (±k)	±0.8
@ 55°C (±k)	±0.6
@ 70°C (±k)	±0.7

Heating-up time *

Heating up time to 37°C (min)	100
Heating up time to 55°C (min)	120
Heating up time to 70°C (min)	125

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Specification | CM120S

Recovery time after doors were open for 30 sec *

@ 37°C (min)	25
@ 55°C (min)	35
@ 70°C (min)	45

Electrical data

Power (W)	400
Frequency (HZ)	50
Voltage (V AC)	220
Current (A)	1.8
Power type	single phase
Plug type	CEE 7/7 plug (compatible with E and F)

Electric energy consumption

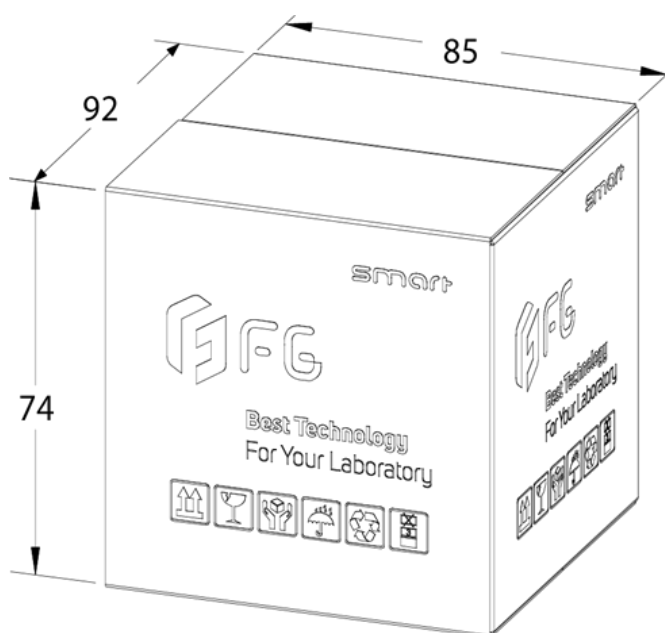|	
@37°C (Wh/h)	30
@55°C (Wh/h)	65
@70°C (Wh/h)	95

Specification | CM120S

Packing/ shipping data

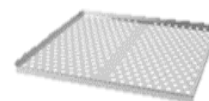| Transport information	Device Must be transported upright
Width incl carton (CM) approx.	85
Height incl carton (CM) approx.	74
Depth incl carton (CM) approx.	92
Packing Material	Carton
Gross weight with packing (KG) approx.	70

* 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 ±10%.
- FG reserves the right to change technical specifications at any time.

Options and accessories |CM120S

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

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