



SMART HOT & COLD INCUBATOR WITH CIRCULATION FAN S CLASS

CIF120S



Tel: +98 26 4533 3747-49 **Zip Code:** 33314-97999



Overview | CIF120S

FG cooling Incubators are equipped with various features, including high precision, repeatability, and temperature uniformity, making them suitable and reliable for the growth of microorganisms and the creation of 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 analyse extensive data from any location around the world.

The CIF120S is a 120-liter forced-air circulation smart incubator.

Main features | CIF120S

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

Circulation fan system with air channel

Equipped with Error Alarm

High energy efficiency

PT100 sensor

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

Tel: +98 21 6299 9032 Zip Code: 13469-54936

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

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HCT (Homogeneous chamber technology)

Temperature stability and reproducibility

Uniformity @ 27 points of chamber

Triple-walled chamber

Fast recovery time

DUAL SAFETY

Class 3.3 independent temperature safety device (DIN12880)

Visual and audible temperature alarm

2 PT100 sensors

Cooling system with the unique technology of NON-CUT

Operable in environmental conditions with high temperatures (up to 30°C)

Temperature stability of \pm 0.1°C, even in the cooling mode

40% saving in energy consumption

Frost-free

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S class controller

Adjustable Smart timer from 1minute to 999 hours it means you can adjust, when timer process starts

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

All parameters stored in internal memory up to 1 year

All parameters logged even in case of power failure

More stability thanks to 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

 $\begin{tabular}{ll} \textbf{Factory:} Shemshad St, Saei Blvd, Nazarabad Industrial estate at 75th Km of Tehran-Qazvin highway, Alborz, Iran \\ \end{tabular}$

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FG SMART MONITOR

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

Programming, managing & transferring data by USB flash

Various reports with graph 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

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

Silicon tape around the door

Rack with tilt protection

Easy cleaning

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Outer body

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

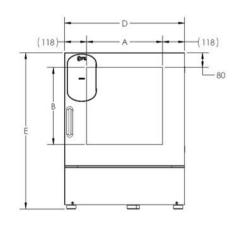
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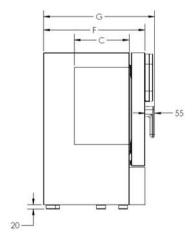
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Specification | CIF120S





Exterior dimensions

Wall clearance, side (cm)	16
wall clearance, rear (cm)	10
Depth Plus door handle and controller (cm) (G)	73
Depth without doorhandle and controller (cm) (F)	67.5
Height (incl. feet) (cm) (E)	89
Width (cm) (D)	82.5
Weight (empty) (kg)	105
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-(3)
Circulation fan	Yes



Specification | CIF120S

Temperature data

Temperature range (° C)	-5 to 80
Display accuracy (deviation) (±K)	±0.2
Temperature fluctuation @ 25 °C (±K)	±0.2
Temperature fluctuation @ 40 °C (±K)	±0.6

Uniformity @ 27 points of chamber (variation)

@ 25 °C (±k)	±0.2
@ 37 °C (±k)	±0.2

Heating-up time *

heating up time to +5 °C (min)	60
heating up time to 25 °C (min)	60
heating up time to 37 °C (min)	65



Specification | CIF120S

Recovery time after doors were open for 30 sec *

@ +5 °C (min)	20
@ 25 °C (min)	10
@ 37 °C (min)	15

Electrical data

Power (W)	2000
Frequency (HZ)	50
Voltage (V AC)	220
Current (A)	9
Power type	single phase

All technical data are specified for units with standard equipment at an ambient temperature of 25 $^{\circ}$ C and a line voltage fluctuation of $\pm 10\%$.

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Options and accessories |CIF120S

Additional stainless-steel rack ==== 0 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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