FG

Best Technology
For Your Laboratory

SMART HOT INCUBATOR WITH
NATURAL CIRCULATION
S CLASS

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CM55S

Overview | CM55S

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 CM55S is a 55-Liter natural air circulation smart incubator.

Main features | CM55S

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

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

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

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

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

email: info@fginst.com
website: www.fginst.com

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Special benefits | CM55S

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 | CM55S

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

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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Special benefits | CM55S

Outer body

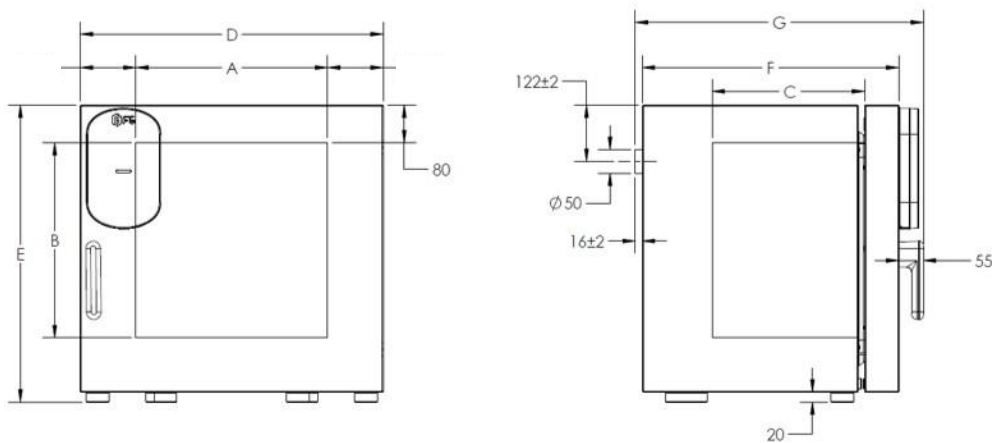| |
|---|
| Air exchange rates and air flap position electronically controllable |
| Pre-heated fresh air prevents temperature fluctuations |
| Very tight door closure with 2-points door latch |
| Beautiful and ergonomic design |

Service and guaranty

10-years after-sales service
5-years heater warranty
2-years guaranty

Specification | CM55S

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)	60
Depth without door handle and controller (cm) (F)	54.5
Height (incl. feet) (cm) (E)	63.5
Width (cm) (D)	64.5
Weight (empty) (kg)	43
Number of doors (ea.)	1

Interior dimensions

Interior volume (l)	55
Height (cm) (B)	41.5
Width (cm) (A)	44
Depth (cm) (C)	32.3
Permitted total load (kg)	20
Load per rack (kg)	5
Racks number standard (max)	2 (4)
Circulation fan	No

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Specification | CM55S

Temperature data

Temperature range approx. 5 °C above ambient temperature to (°C)	80
Display accuracy (deviation) (±K)	±0.1
Temperature fluctuation @ 37 °C (±K)	±0.1
Temperature fluctuation @ 50 °C (±K)	±0.1

Uniformity @ 27 points of chamber (variation)

@ 37 °C (±k)	±0.2
@ 50 °C (±k)	±0.5

Heating-up time *

heating up time to 37 °C (min)	60

Specification | CM55S

Recovery time after doors were open for 30 sec *

@ 37 °C (min)	15
@ 50 °C (min)	20

Electrical data

Power (W)	400
Frequency (HZ)	50
Voltage (V AC)	220
Current (A)	1.8
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 ±10%.

Options and accessories |CM55S

Additional stainless-steel rack
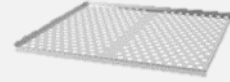
Access port with silicone plug

Metal-framed glass doors

Qualification folder IQ/OQ/PQ

Calibration certificate

Interior lighting

External sensor

Rack

Door lock

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