HORIZONTAL LAMINAR FLOW CABINET TO PROTECT THE SAMPLE

CRUMA HZ-4

The new **Cruma HZ-4** is a horizontal laminar flow cabinet Class ISO 5 (former class 100) ideal for works that should ensure the protection of the products against external and cross-contamination.

The unique mounting system of the sidewalls, positioned inside the perimeter of the filter, prevents contaminants from entering into the work area through the same filter frame thanks to the Venturi-effect.

The air passes through a polyurethane fiber G-4 prefilter and it is pushed by the fan to the retention plenum, then goes through the absolute HEPA filter and reaches the working chamber.

The airflow leaving the HEPA filter placed in front of the operator, at a constant speed, creates an ISO 5 sterile area removing any possible contaminants from the product you are working.
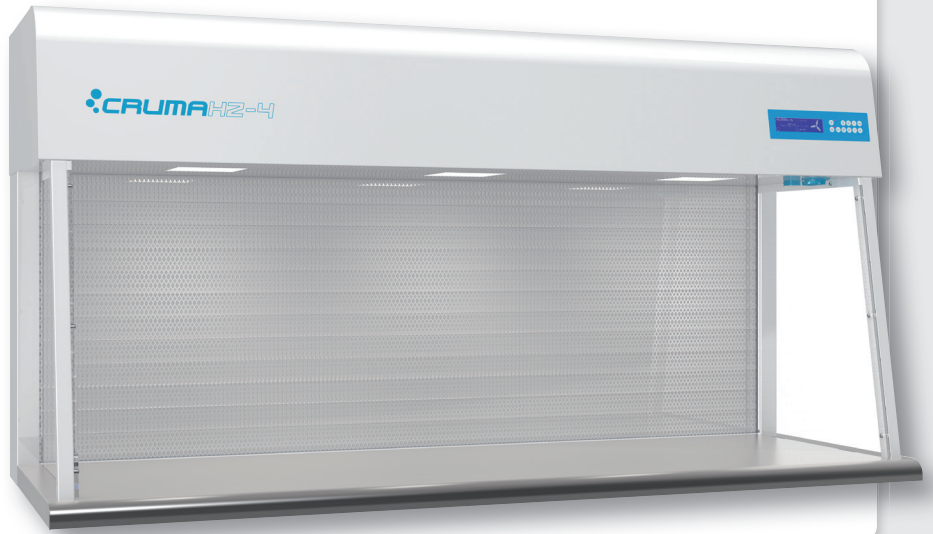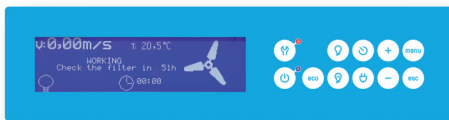
USES

√ Parenteral bags reconstruction
√ Assisted reproductive technologies
√ Micropropagation
√ Plant Cell Cultures
√ Food and water quality control
√ Dust Protection in optics and electronics industry
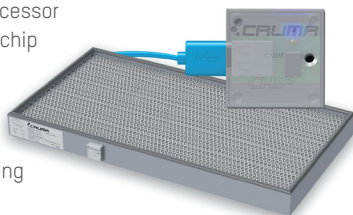
NEW TECHNICAL FEATURES

More info on the new LCD screen

√ Large-format display 127x34 mm
√ Type of filter installed, working hours, expiry date and next revision
√ Countdown Timer
√ Clock and calendar

New features and components

√ Initial cycle flow adequacy and final cycle purge
√ Fault LED indicator
√ Air Flow Control by Microprocessor
√ HEPA filters with electronic chip
√ LED Lighting

New alarms and warnings

√ Next validation warnings
√ Few hours of filter life warning
√ Countdown timer warning
√ Expired filter alarm (by hours)
√ Expired filter alarm (by date)
√ Equipment without filter alarm

MAIN FEATURES

√ **Manufacture:** The external surfaces are made of cold-rolled steel with a grey/ochre coating, stove-enamelled, and features resistance against chemical compounds used for sterilisation. On the other hand, the working surface is made of AISI 304 2B stainless steel.

√ **HEPA absolute filter:** With flow equaliser, efficiency higher than 99.995 % on particles of 0.3 microns.

√ **Fan:** Centrifugal motor with double suction, suitable to provide laminar flow in the working area, especially in order to cope with the saturation of the filters.

√ **Control panel:** Soft-touch keyboard with switch for LED lamps, UV, air maintenance system (electronically self-regulating air speed), output speed display and control buttons for speed adjustment.

√ **Lighting:** It has LED lamps with prismatic diffuser screens located in the central part, which improves light distribution over the work area.

TECHNICAL INFORMATION

Number of filters	1
Number of IP44 fans	3
Average face velocity	0.40 m/s
Internal volume of the cabinet	0.684 m^3
Total electrical power consumption	211 W
Voltage-Frequency	110-220 V / 50-60 Hz
LED light level	1100 lx
UV germicidal lamp	Optional
Noise Level	57 ± 3 dB
Packaging: 100% recycled wooden box with international phytosanitary certificate	Volume	2.30 m^3
	Weight	270 Kg

CRUMA
Laboratory equipment made in Barcelona

www.cruma.es   export@cruma.es

CE   CERTIFIED ISO 9001 2015   our engagement

CRUMA HZ-4
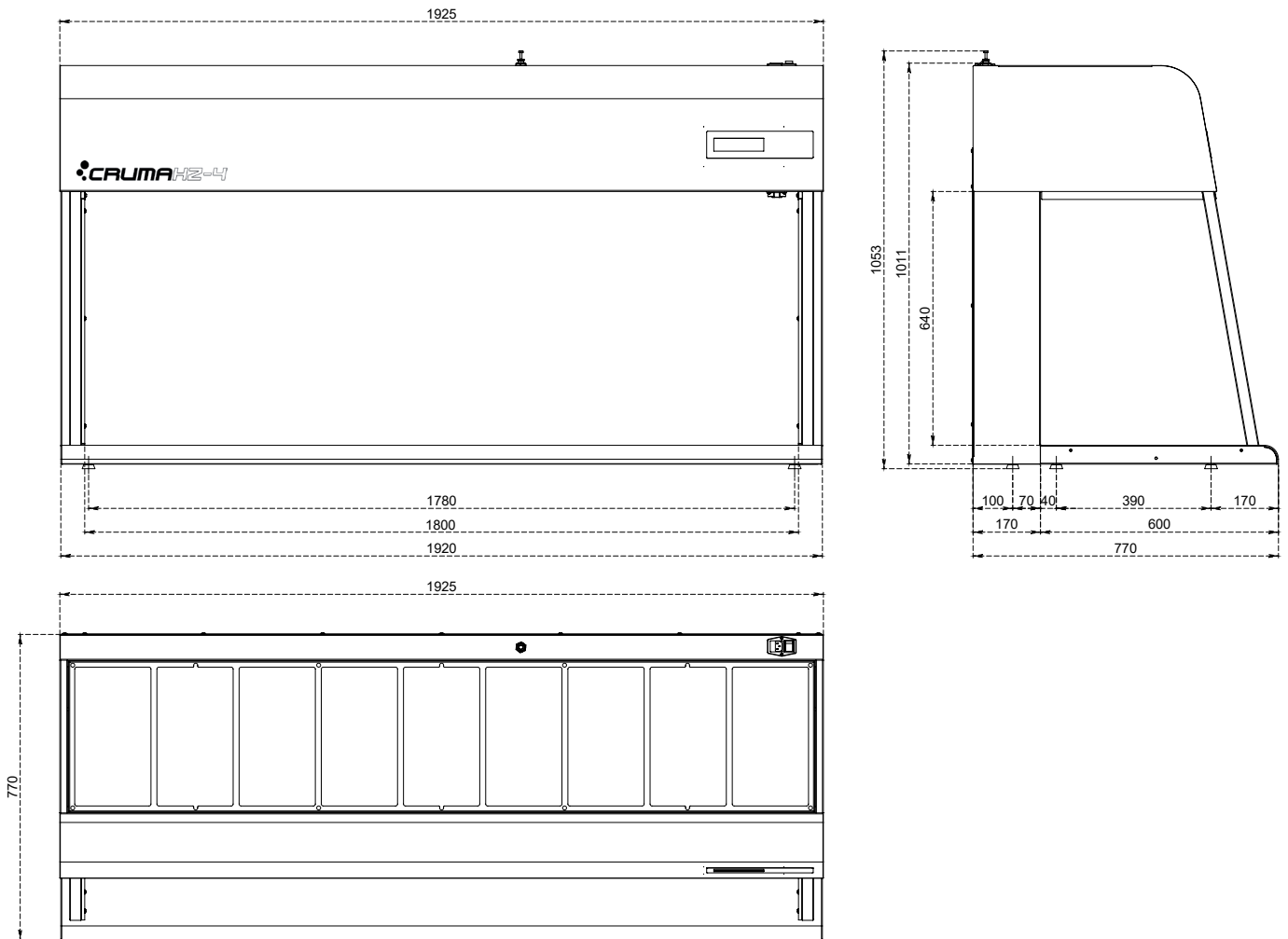
SIZES (mm)

SIZES (mm)

	Exterior			Interior		
Width	Depth	Height	Width	Depth	Height
1925	771	1053	1800	600	640

STRUCTURE

Metallic parts	In 1.2 mm galvanized steel coated with anti-corrosion thermosetting polymer resin hardened at 200 ºC
Side Panels	In transparent polymethyl methacrylate (PMMA), 8 mm thick. Light transmission 93%.

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CRUMA HZ-4

STANDARD EQUIPMENT

Electronic circuit with large format LCD display	Security levels: User (level 1) and Advanced (level 2)
Electronic control device for filter	The filters incorporate a chip with USB connection that identifies the type of installed, expiry date and the serial number.
Illumination (3)	LED panel (3u) high light intensity and low power consumption - 15 W / 1200 lm
Electronic chronometer	For the supervision and control of work carried out in the fume hood
Clock and calendar	Display of date and time
Working surface	Working surface made in inox steel AISI 304 2B
G4 prefilter	G4 class pre-filtering blanket of synthetic biofibres (according to EN-779) for the retention of atmospheric dust
Warranty	10 years

OPTIONAL EQUIPMENT

Tubular steel stand for CRUMA HZ-4
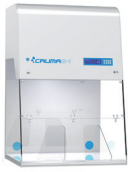
Portable UV light (2 x 15 Watt UV lamps)

COMPLIANCE TO STANDARDS

Filters	UNE EN ISO 16890:2017 EN-1822:2010 (HEPA & ULPA Filters)
Quality	UNE EN ISO 9001:2015

We recognise our responsability
and dependence towards a healthy environment and,
therefore, we destinate more than 7% of our annual budget in
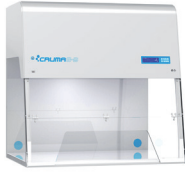innovating and developing new products for the lab operator

our 7% engagement

CRUMA
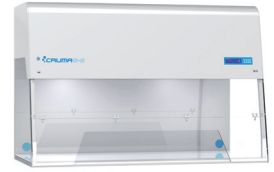Laboratory equipment made in Barcelona

CRUMA
Laboratory equipment made in Barcelona

50 years
1974–2024

PLUG&PLAY RANGE

G-1   G-2   G-3   G-4   G-5

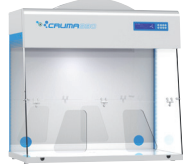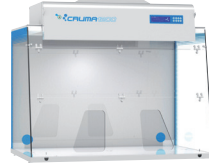## CLASSIC RANGE

670   870   990   1010   1200   1200XL   ECO²

VENTED STORAGE CUPBOARDS

2010   ECO²

POWDER CABINETS

H⁺

POWDER WEIGHING CABINETS

P-1   P-2

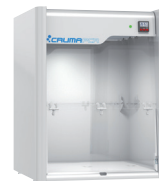## PRECISION WEIGHING CABINET
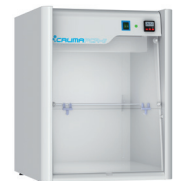
W-2

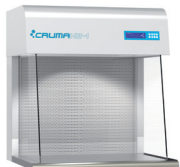## LAMINAR FLOW CABINETS

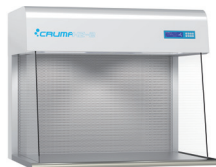670FL   870FL   FL-1   FL-2

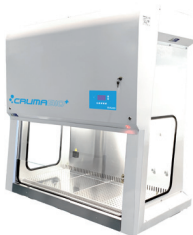## PCR CABINETS
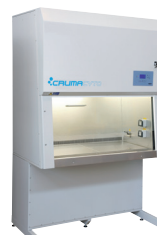
PCR   PCR-V

HZ-1   HZ-2   HZ-3   HZ-4

BIOSAFETY CABINETS

BIO⁺   VIRUSFREE   CYTO-2&3

CO₂ INCUBATOR

INCUBATOR

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