DUCTLESS FUME HOOD

CRUMA G-3

The new Cruma G-3 is perfect to remove low quantities of gaseous polluting agents and/or solid particles/aerosols from its working area in a simple, secure, efficient and cost effective way, protecting both the user and the environment.

Cruma G-3 ductless fume hood uses the patented* Cruma Filtration System, without any exterior duct connection. All molecular and dust particles are absorbed and retained into the filtration system. *Invention Patent No.2397598

CERTIFIED –Made in Barcelona and certified by an external laboratory according to international standards, and complying with the criteria of ISO 9001 standard.

PLUG&PLAY –It is sent from our warehouse assembled, and whenunpacked it just needs to be connected into a plug.

FLEXIBLE –It can be used in hard-to-duct areas such as the center or bottom level of multi-level buildings.

TURNKEY –Installation expenses are far less than traditional hoods because no ductwork and remote blower are required.

GREEN & SUSTAINABLE –Unlike traditional fume hoods, costly tempered room air is not exhausted from the laboratory, resulting in lower energy costs.

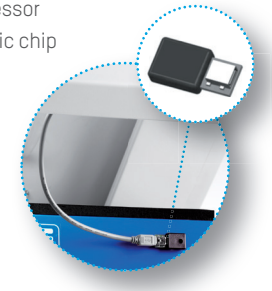
NEW FEATURES

More information on the new LCD display

- √ New size 127x34mm display
- √ Air speed continuously monitored
- √ Type of filter installed, working hours, expiration date and next revision date
- √ Open door warning through electronic photocell
- √ Countdown timer
- √ Clock and calendar

New features and components

- √ Initial air flow cycle adequacy and final purge cycle
- √ Fault LED
- √ Control of air flow through Microprocessor
- √ Activated carbon filters with electronic chip
- √ Internal temperature sensor
- √ LED illumination



New alarms and scheduled warnings

- √ Open door warning
- √ Open door in off mode warning
- √ 60h of filter use warning
- √ Next validation warning
- √ Few hours of filter life warning
- √ Countdown timer warning
- √ Expired filter alarm (by hours)
- √ Expired filter alarm (by date)
- √ Temperature alarm
- √ Equipment without filter alarm
- √ Low barrier alarm

USES

General chemistry involving small volumes of reagents or chemical compounds at ambient/moderate temperature in all types of laboratories:

- √ Research laboratories
- √ Quality control laboratories
- √ Clinical and hospital laboratories
- √ University and school laboratories

...In general, in any kind of laboratory.

TECHNICAL FEATURES

Number of filtration columns		2
Number of filters		2 to 6
Number of IP44 fans		2
Average volume of treated air		157 m^3/h
Average face velocity		0,50 m/s
Internal volume of the cabinet		0,67 m^3
Renewals inside the cabinet / min		4,2
Total electrical power consumption Voltage-		174 W
Frequency		110-220 V / 50-60 Hz
LED light intensity		900 Lux
Noise level		45 dB
Packaging: 100% recycled wooden box with international phytosanitary certificate	Volume	1,24 m^3
	Weight	130 Kg

SIZES (mm)

External Dimensions			Internal Dimensions		
Width	Depth	Height	Width	Depth	Height
1197	850	1195	1176	800	762

It is not a typographical error, *7 year warranty*

Because we are convinced of the quality of our products.

7 YEARS GUARANTEE / 7 AÑOS GARANTÍA

*More information www.cruma.es

Well done, well shipped. *Our responsible packaging*

Wood box 100% recyclable with international phytosanitary certificate.

Do you need help or *technical assistance?*

Contact your distributor or call us if you have any questions or need technical support, spare parts, maintenance service...

+34 93 370 61 62

DUCTLESS FUME HOOD

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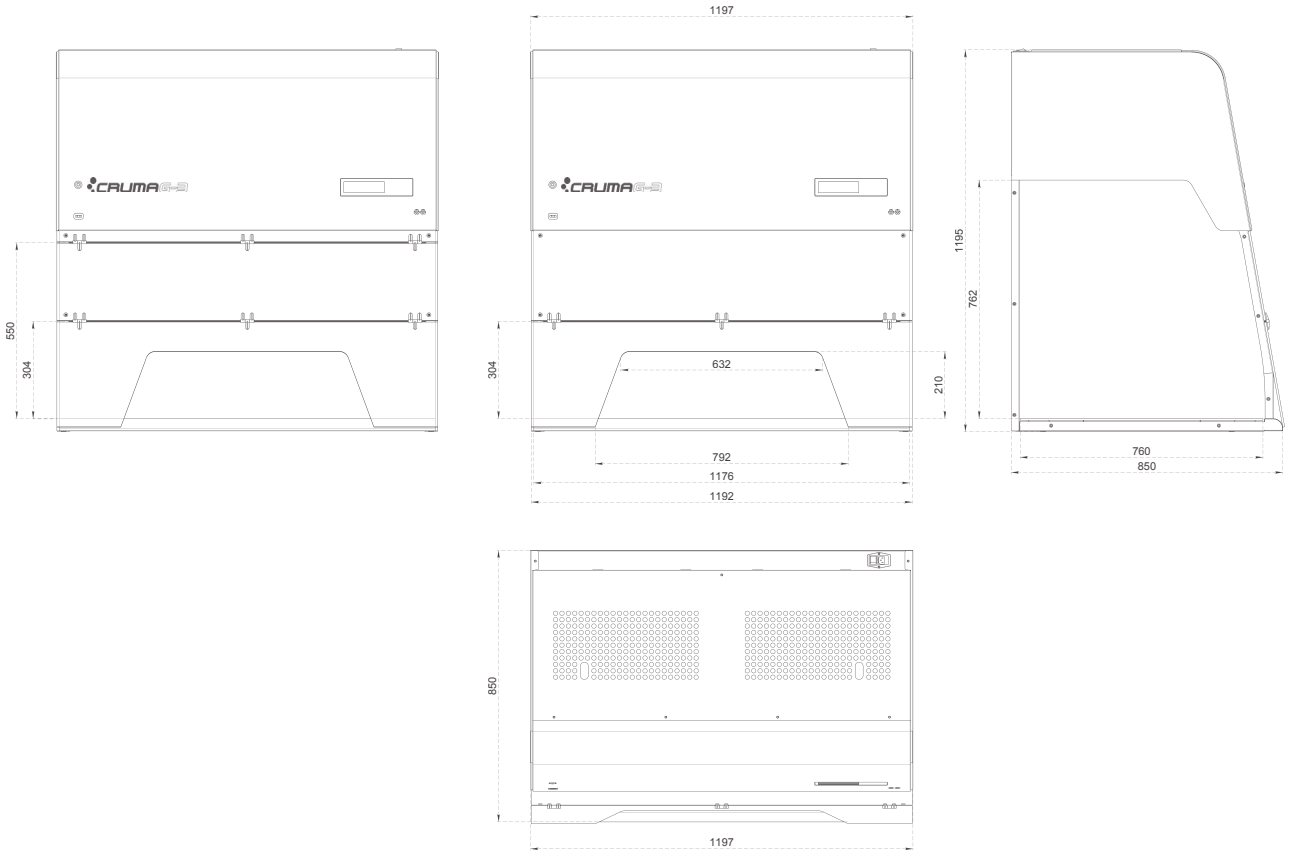
SIZES (mm)



SERIAL EQUIPMENT

Electronic circuit with large format LCD screen	Security levels: level 1 for users and level 2 for maintenance users
Electronic anemometer device	Electronic sensor monitoring continuously air face velocity
Photocell sensor device for open door detection	Electric device with open door alarm
Electronic control device for filters replacement	The filters incorporate a microchip with miniUSB connection that identifies the type of filter installed, the expiry date and the serial no.
Illumination	96 LED Tube high light intensity and low power consumption - 16 Watts / 700 Lux
Temperature sensor	Continuous monitoring of the temperature inside the cabinet
Sampling system to analize the filtered air at the exhaust	To detect the level of filter saturation
60 hours alarm	Countdown timer according to French NF X 15-211:2009
Electronic cronometre with audible alarm	To program the work inside the fume hood
Clock and calendar	Display of date and time
Working surface 1	Spill retention tray (2-10 liters) with working surface in white tempered glass
G4 Prefilter	G4 class pre-filtering blanket of synthetic biofibres (according to EN-779) for the retention of atmospheric dust
Cable entry holes (2)	Access to the rear wall for cables and / or services entry
Chemical Listing	Guide of retained products by type of filter
Warranty	7 years

OPTIONAL EQUIPMENT

Molecular detector	Automatic Alarm Device for detection of saturation in organic vapors filters (required for Class I according to standard NF X 15-211:2009)
Movilair	Stand with wheels and internal tray in Epoxy coated steel
Tubular steel stand	Support stand in Epoxy coated steel
Working surface 2	Spill retention tray (2-10 liters) with working surface in phenolic resin
Working surface 3	Spill retention tray (2-10 liters) with working surface in inox steel
Transparent rear back pannel	Transparent polymethylmethacrylate rear pannel 8 mm thick (light transmission of 93%). Ideal for teaching sessions
Voltage / Frequency	125 V / 50 Hz
Filter test kit	Dräger pump with reactive colorimetric tubes (pack 10u)
Junction frame	Allows to join two units of the same model without internal divisions

MAIN STRUCTURE

Metal parts: base frame, rear wall and head	1.2 mm galvanized coated steel with anti acid polymer resin powder heat-hardened at 200 °C
Front and side panels	Transparent polymethylmethacrylate 6 mm thick (light transmission of 93%)

CRUMA
Laboratory equipment made in Barcelona

CE

LLOYD'S REGISTER QUALITY ASSURANCE R ISO9001

DUCTLESS FUME HOOD

CRUMA G-3

FILTER TYPES

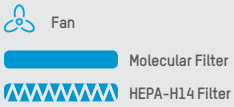
Type A	For **organic vapors** such as ketones, ethers, alcohols, xylenes ... Eventually it can be used for inorganic acids, but only if used in small quantities because this activated carbon is not impregnated and the excess of acid vapors could saturate it quickly.	**Type K**	For **NH3 vapors and amines**; also good for other organic compounds. Carbon with metal salt complexes impregnation.
Type BE	For **inorganic acid vapors** as H2S04, HCl, HN03, and volatile sulfur compounds such as H2S, S03, ... It can be used with organic vapors because the activated carbon incorporates impregnation of metal compounds and neutralizing salts. It is also suitable to filter organic and inorganic compounds when they are in similar proportions.	**Type ABEK**	**Mixed type** to be used when the ratios between organic, inorganic and NH3/amines are similar.
Type F	For **formaldehyde vapors** and derivatives; also good for other organic compounds. Carbon impregnated with Cu leads, so that it should never be used with inorganic acid vapors.	**Type D**	**HEPA H-14** filter (High Efficiency Particulate Air, according to EN-1822: 1998) for filtering dust and smoke particles.

MODULAR FILTRATION COLUMN FOR GASES AND PARTICLES (according to NFX 15-211:2009)

CLASS 2		CLASS 1	
Type G Handling of liquid compounds/products		**Type 2G** Liquid compounds/ products handling with security molecular filter	
Type GS Handling of liquid and particles compounds/ products		**Type 2GS** Liquid and particles compounds/products handling with molecular security filter	
		Type 2GD Handling of liquid compounds in clean room with molecular security filter	

FILTRATION COLUMN FOR POWDERS

Type D Handling of powder compounds	
Type DD Handling of powder compounds in clean room	
Type 2DD Handling of powder and molecular compounds in clean room with molecular security filter	

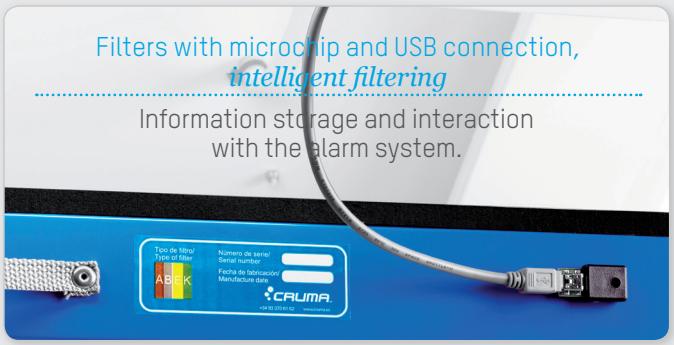


ACCORDING TO STANDARDS

Cabinets / Fume Hoods	AFNOR NF X 15-211:2009 (France) BS 7258: 94 (UK) BS 7989: 2001 (UK) ANSI/ASHRAE 110-1995 (USA)
Filters	CSA Z 316.5-94 (Canada) EN-779: 1996 (HEPA & ULPA Filters) EN-1822:1998 (HEPA & ULPA Filters) EN-141:2001 (Gas Filters)
Quality	UNE EN ISO 9001:2008

Filters with microchip and USB connection,
intelligent filtering

Information storage and interaction with the alarm system.



we recognise our responsibility and dependence towards a healthy environment and, therefore, donate 1% of our annual sales to environmental organisations around the world.

A. Canals

our 1% engagement

www.cruma.es
export@cruma.es

CRUMA
Laboratory equipment made in Barcelona

CRUMA
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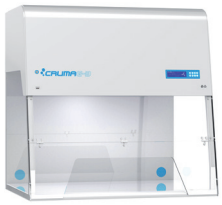
CRUMA
PLUG&PLAY RANGE


G-1


G-2


G-3

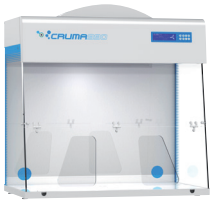

G-4


G-5

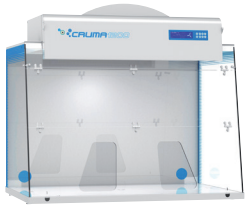
CRUMA
CLASSIC RANGE


670

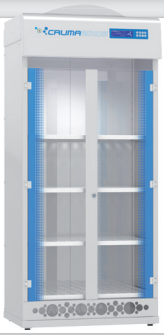

870


930


1010


1200


ECO



CRUMA
VENTED STORAGE CUPBOARDS

2010

CRUMA
POWDER CABINETS


P-1


P-2

CRUMA
PCR CABINET


PCR

CRUMA
CO_2 INCUBATOR


INCUBATOR

CRUMA
LAMINAR FLOW CABINETS


670FL


870FL


FL-1

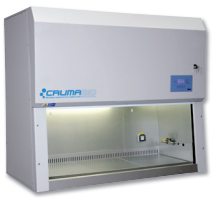

FL-2

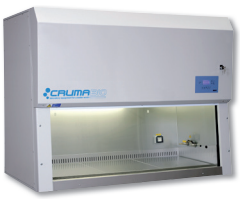

HZ-1


HZ-2

CRUMA
BIOSAFETY CABINETS


BIO-1


BIO-2


BIO-3


VIRUSFREE


CYTO-2&3

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