

Cruma ductless fume hood with the largest working surface. Perfect to remove gaseous polluting agents and/or solid particles/aerosols from the working space in a simple, efficient and cost effective way, protecting both the user and the environment. CRUMA 1200 ductless fume hood uses the CRUMA filtration system, without any exterior connection.

PROTECTION OF AND RESPECT FOR THE ENVIRONMENT - The toxic chemical products are not released outside but retained within the filter.

COST SAVINGS AND FAST SET UP – No building work is needed to install ducts to channel the gas outside, which means fewer problems for a laboratory working at full capacity.

FLEXIBLE - It can be used in areas where it is difficult to remove/extract contaminated air, such as from the lower levels in buildings that have a number of floors.

ENERGY SAVINGS - The air that is sucked in is not expelled but recirculated back into the lab after the contaminating substances have been removed. This means that it is not necessary to increase the use of the air-conditioning or heating systems to compensate for the air removed.

**CERTIFIED** – Manufactured in Spain and certified by an external laboratory according to international standards and applying the criteria of ISO 9001.

#### **NEW FEATURES**

#### More information on the new LCD display



#### √ New size 127x34mm display

- √ Air speed continuously monitored
- $\checkmark$  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

#### 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)
- ✓ 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
- $\checkmark$  Clinical and hospital laboratories √ University and school laboratories
- ...In general, in any kind of laboratory.

TECHNICAL FEATURES			
Number of filtration columns		1	
Number of filters		1 to 2	
Number of IP44 fans		1	
Average volume of treated air		160 m³/h	
Average face velocity		0,50 m/s	
Internal volume of the cabinet		0,697 m <sup>3</sup>	
Renewals inside the cabinet / min		3,9	
Total electrical power consumption		$60 \pm 3 W$	
Power supply 1		220-240 V ~ 50-60 Hz	
LED light intensity		15 W / 800 lx	
bise level 58 ± 3 dB		58 ± 3 dB	
Packaging: 100% recycled wooden box	Volume	0,65 m <sup>3</sup>	
with international phytosanitary certificate	Weight	118 Kg	

SIZES (m	m)				
External			Internal		
Width <b>1200</b>	Depth <b>800</b>	Height 1097	Width 1175	Depth <b>760</b>	Height <b>780</b>

#### It is not a typographical error, 10 year warranty

Because we are convinced of the quality of our products.





Our responsible packaging Wood box 100% recyclable with international phytosanitary certificate.

Well done, well shipped.



www.cruma.es export@cruma.es

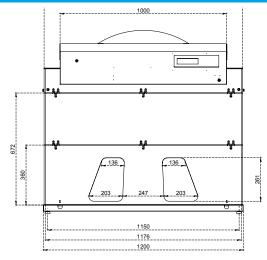


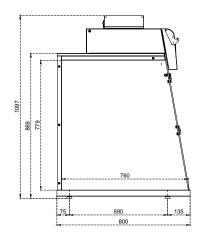
Do you need help or

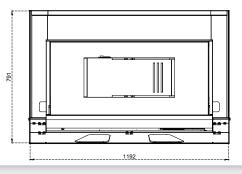


## 

#### 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 chip with USB connection that identifies the type of filter installed and the expiry date
Illumination	LED Tube high light intensity and low power consumption - 15W / 800 lux
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	64 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	10 years

OPTIONAL EQUIPMENT				
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 stainless steel			
Transparent rear back pannel	Transparent polymethylmethacrylate rear pannel 8 mm thick (light transmission of 93%). Ideal for teaching sessions			
Filter test kit	Dräger pump with reactive colorimetric tubes (pack 10u)			

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%)





## 

FILTER	R TYPES		
Туре А	For <b>organic vapors</b> 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.	Туре К	For <b>NH<sub>3</sub> vapors and amines</b> ; also good for other organic compounds. Carbon with metal salt complexes impregnation.
Туре ВЕ	For <b>inorganic acid vapors</b> as H <sub>2</sub> SO <sub>4</sub> , HCl, HNO <sub>3</sub> , and volatile sulfur compounds such as H <sub>2</sub> S, SO <sub>3</sub> , 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.	Туре АВЕК	<b>Mixed type</b> to be used when the ratios between organic, inorganic and NH <sub>3</sub> /amines are similar.
Туре F	For <b>formaldehyde vapors</b> and derivatives; also good for other organic compounds. Carbon impregnated with KI leads, so that it should never be used with inorganic acid vapors.	Туре D	<b>HEPA H-14</b> filter (High Efficiency Particulate Air, according to EN-1822: 2010) for filtering dust and smoke particles.

MODULAR FILTRATIO	N COLUMN FOR GASE	S AND PARTICLES (accordi	ng to NFX 15-211:2009)	FILTRATION COLUMN	FOR POWDERS
CLASE 2				0	
<b>Type G</b> Handling of liquid compounds/products	æ	<b>Type 6S</b> Handling of liquid and particles compounds/	æ	Type D Handling of powder compounds	
ACCORDING TO STAN	NARDS	products		🖧 Fan	
Cabinets / Fume Hoods	AFNOR NF X 15-211:2009 (France) BS EN 14175:2012 BS 7989: 2001 (UK)		Filters with microchip and USB connection, intelligent filtering Information storage and interaction with the alarm system.		
Filters	UNE EN ISO 16890:2017 UNE EN 14387:2004 A1: EN-1822:2010 (HEPA &	2008	Scal		
Quality	UNE EN ISO 9001:2015		e CH	Tenuna	

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 72 engagement



www.cruma.es export@cruma.es

our 🕫 engagement

CE (50 9001)



PLUG&PLAY RANGE



Pol. Ind. Fonollar - Andorra, 19A - 08830 Sant Boi de Llobregat - Barcelona T. +34 93 370 61 62 - export@cruma.es - www.cruma.es

