

## CD8

Easy-Load All-In-One Automatic Fast





CryoDry's® All-In-One Process simplifies the freeze-drying process by combining freezing and drying into a single step. Unlike traditional passive freeze-dryers, there is no need for a separate freezing step, eliminating the need for additional manual handling. Our CD8 features programmable shelves with a temperature range of -40°C to +60°C, which provides precise control over the entire process from freezing to heat application for primary and secondary drying. This enables tailoring of the drying process to your product, resulting in efficient and effective drying. CryoDry's® All-In-One Process, with its programmable shelves and all-in-one design, is a powerful and versatile tool for freeze-drying applications.



The new and innovative autodry mode is perfect for beginners or users who do not want to setup their own drying programs.

The program uses an advanced algorithm to determine drying progress. It automatically adapts drying parameters and identifies process end.



The CryoDry® freeze dryer is specifically designed for bulk applications, offering several advantages over traditional passive freeze dryers. The unit's Easy-Load feature allows for convenient cupboard-style loading and unloading of bulk product - in trays, plates, bottles and similar - without requiring heavy acrylic or stainless steel manifolds being lifted for internal access. Additionally, the CryoDry® CD8 offers a range of thermal transfer blocks that enable efficient and fast freeze-drying of tubes, vials, and ampules.



The CryoDry® freeze dryer is designed to be fast and efficient in the freeze drying process. It features temperature-controlled shelves enabling fast freezing and even faster drying.

This capability is not available in traditional passive freeze dryers that use flasks or unheated shelves. Our programmable shelves have a temperature range of -40°C to +60°C, making the freeze drying process customisable. Heated shelves for active drying energy input means, that the CryoDry® freeze dryer can significantly reduce drying time, resulting in time savings of typically more than 60% over traditional passive freeze drying.

#### CAPACITY

- Benchmark Size-to-Capacity Ratio
- Ice Condenser Volume 11 I
- Ice Condenser Capacity 8 kg
- Condenser Performance 4 kg per 24h

#### COMPACT

CryoDry® CD8 is a true benchtop unit. With dimensions of only 770 (d) x 748 (w) x 507 (h) mm the unit sits comfortably on most laboratory benches.

#### **ERGONOMIC**

Easy access to power switch, interfaces, power supply, vacuum and drain. Easy-access fuse

#### **NATURAL REFRIGERANT**

Use of R290 is environmentally friendly, with minimal carbon footprint and ultra-low greenhouse warming potential (GWP). Guaranteed long term availability (unlike ozone depleting CFC and HCFC). Easy and affordable service.

#### PROGRAMABLE SHELVES

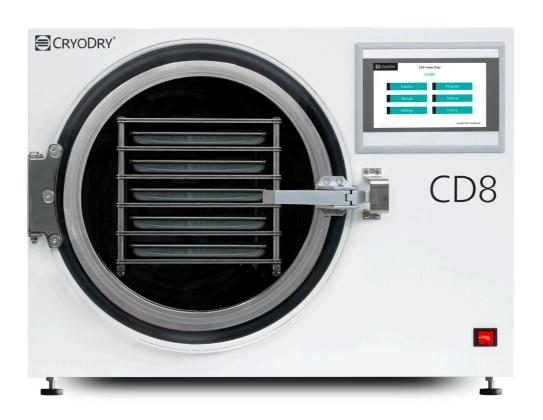
Temperature range of -40°C to +60°C allows for precise control of the entire process from freezing on shelf to programmable heat application during drying.

#### SAMPLE INTEGRITY

Our unique Sandwich Shelf Stack design eliminates the need for heater adhesives. This improves sample integrity, process compatibility and food / product safety. The heaters themselves are food safety certified.

#### **FLEXIBILITY**

9, 7, 5, 3 or 1 heated shelf options. Shelf distances from 16 mm to 188 mm. Simple plug-and-play interchange of shelf stack configurations.



#### autodry MODE

The CD8 automatically dries your product and determines process completion. This eliminates the need for guesswork, cycle development and programming.

#### **VACUUM OVEN MODE**

Vacuum Oven Mode enables energy saving operation as well as shorter heat up times unlocking a wide range of new applications outside of the traditional freeze drying space.

#### **GLOBAL CERTIFICATION**

For your peace of mind, the CD8 offers certification according to UL (USA), CSA (Canada) CE (Europe) and RCM (Australia/New Zealand)







### **POWER EFFICIENCY**

power outages.

The combination of our inverterbased wide range compressor, a highly efficient global power supply, solid state relays and other highly efficiency components result in the CD8 having market leading energy efficiency.

**GLOBAL POWER SUPPLY** 

The CD8 can operate at low and high

(50/60Hz), making it compatible with

power supplies worldwide.

**POWER RECOVERY** 

Our power outage recovery

function retains cycle progress and

re-starts automatically in transient

voltages as well as variable frequencies



#### **DRYING EFFICIENCY**

Range of heating blocks allowing efficient freeze drying in tubes. Sizes range from Eppendorf tubes to 50 ml Falcon tubes. The blocks allow for better heat transfer, resulting in shorter run times. Custom sizes available.



#### **POWERFUL, PURE & QUIET**

The HiScroll Vacuum Pump offers market leading performance, lowest energy consumption and class leading service intervals for lowest cost of ownership.

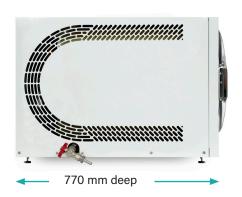


#### SPECIFICATIONS .

REFRIGERATION	
Total Condenser Volume	11 litres
Ice Condenser Capacity	8 kg
Condenser Performance	4 kg per 24 hours
Ice Condenser Temperature	< -45 °C
Refrigerant	R290
Typical Product Capacity	9.6 kg at 80% moisture
Defrost Function	Shelf heating
VACUUM	
Ultimate Vacuum	1.5 x 10 <sup>-1</sup> mbar
SHELVES	
Number of Shelves	5
Shelf Stack Options	9, 7, 3 and 1 shelves
Inter-shelf Distance	9 Shelves 16 mm
	7 Shelves 22 mm
	5 Shelves 33 mm
	3 Shelves 59 mm
	1 Shelf 188 mm

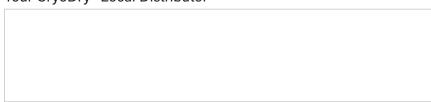
Tray Size	200 x 450 x 15 mm
Minimum Shelf Temperature	-40 °C
Maximum Shelf Temperature	+60 °C
POWER REQUIREMENTS	
Electrical	AC 120V 14A 50/60Hz
	AC 220-240V 8A 50/60Hz (Not for UL-mark)
Maximum Vacuum Pump Current	AC120V, 50/60Hz; 2.8A AC220-240V, 50/60Hz; 1.6A
INTERFACES	
Interfaces	USB-A, USB-B
SIZE AND WEIGHTS	
External Dimensions (DxWxH)	770 x 748 x 507 mm
Weight	87 kg
Noise Level (without vacuum pump)	54 dB(A)







#### Your CryoDry® Local Distributor



# CryoDry Unit 31, 1 Talavera Road, Macquarie Park NSW 2113 Australia contact@cryodry.biz

