

M-Series

Compact Preservation

The Multidrier range are smaller machines ideal for compact spaces & small production runs. They are highly versatile can be used in a variety of applications. Available in a range of sizes and specifications, they can be configured to suit the needs of any application.



Multidrier

“Compact & Versatile”



**Slow Process
Drying**



**Optional
Shelving**



Moveable



Key Features

M-Series Freezedriers are the ideal solution for compact freeze drying. The Multidrier is a slow process machine suited for drying delicate items that could be damaged via alternative methods. Such applications include water damaged document recovery, dried flowers & archaeological artefacts.

The Multidrier Freezedrier is a small-scale machine that can be used for preservation of small sized objects. The shelf sizes & spacing are customisable to the client's requirements making this an incredibly versatile solution to Freeze-drying a variety of objects.

Technical Data

Multidrier

Ice Condenser Capacity	10kg
Ice Condenser Performance	10kg /24h
Ice Condenser Temperature	-50°C
Defrost	Hot Gas
Number of Trays	4-6
Tray Area	1m ² - 1.6m ²
Shelf Spacing	15, 31 or 58mm
Chamber Temperature	Up to 40°C
Cooling systems	Air cooled
Refrigeration	10m ³ ph Compressor
Unit Dimensions (H x W x L)	1.3m x 0.7m x 1.3m
Refrigerant	R404A
Vacuum	Kurt J Lesker RV212
Chamber Dimensions	500mm id x 750mm
Power Supply	220-240 V 50/60 Hz
Control System	Manual Controls

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This tall variation allows easier access for production focused loading & unloading.

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Ice Condenser Temperature	-50°C
Defrost	Hot Gas
Number of Trays	4-6
Tray Area	1m ² - 1.6m ²
Shelf Spacing	15, 31 or 58mm
Chamber Temperature	Up to 40°C
Cooling systems	Air cooled
Refrigeration	10m ³ ph Compressor
Unit Dimensions (H x W x L)	1.8m x 0.7m x 1.3m
Refrigerant	R404A
Vacuum	Kurt J Lesker RV212
Chamber Dimensions	500mm id x 750mm
Power Supply	220-240 V 50/60 Hz
Control System	Manual Controls



Multidrier Extra

"Compact & Versatile"



**Fast Drying
Capability**



**Fast Product
Freezing**



Moveable



Key Features

The Multidrier-Extra is unique to our standard range in that it utilises shelf fluid circulation to allow rapid cooling & heating. This enables a faster production turnaround and finely controlled heating/cooling parameters. The automated controls allow for recipes to be used, as well as detailed information to be displayed in real time.

The Multidrier Extra Freezedrier is a small-scale machine that can be used for preservation of small sized objects. The shelves circulate heat transfer fluid enabling them to be heated & cooled, resulting in a high performance system.

Technical Data

Multidrier Extra

Ice Condenser Capacity	10kg
Ice Condenser Performance	10kg /24h
Ice Condenser Temperature	-50°C
Defrost	Hot Gas & Electric
Number of Shelves	4+1
Shelf Area	0.45m ²
Shelf Spacing	60mm
Shelf Temperature	-45°C to +60°C
Cooling systems	Air cooled
Refrigeration	10m ³ ph Compressor
Unit Dimensions (H x W x L)	1.8m x 0.7m x 1.4m
Refrigerant	R404A
Vacuum	Kurt J Lesker RV2 12
Chamber Dimensions	500mm id x 750mm
Power Supply	415-480V 50/60 Hz
Control System	Automated or Manual Controls

Multidrier Extra

“Compact & Versatile”



**Fast Drying
Capability**



**Fast Product
Freezing**



Moveable



Key Features

The Multidrier-Extra is unique to our standard range in that it utilises shelf fluid circulation to allow rapid cooling & heating. This enables a faster production turnaround and finely controlled heating/cooling parameters. The automated controls allow for recipes to be used, as well as detailed information to be displayed in real time.

The Multidrier Extra Freezedrier is a small-scale machine that can be used for preservation of small sized objects. The shelves circulate heat transfer fluid enabling them to be heated & cooled, resulting in a high performance system.

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Ice Condenser Capacity	10kg
Ice Condenser Performance	10kg /24h
Ice Condenser Temperature	-50°C
Defrost	Hot Gas & Electric
Number of Shelves	4+1
Shelf Area	0.45m ²
Shelf Spacing	60mm
Shelf Temperature	-45°C to +60°C
Cooling systems	Air cooled
Refrigeration	10m ³ ph Compressor
Unit Dimensions (H x W x L)	1.8m x 0.7m x 1.4m
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Vacuum	Kurt J Lesker RV212
Chamber Dimensions	500mm id x 750mm
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Control System	Automated or Manual Controls

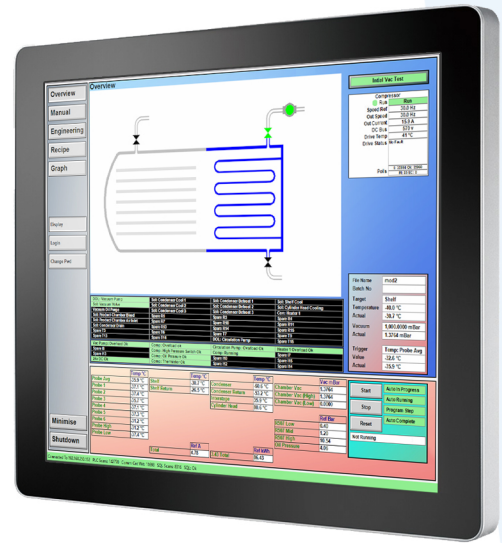


AUTOMATED SCADA SYSTEM

High performance touch screen Scada system combined with an Omron PLC. This enables advanced recipes to be written and implemented into an Automatic Freeze Drying cycle, ensuring consistency & user error avoidance.

The system also provides the operator with detailed information on pressures, temperatures & valve positions, as well as advanced options & graph output.

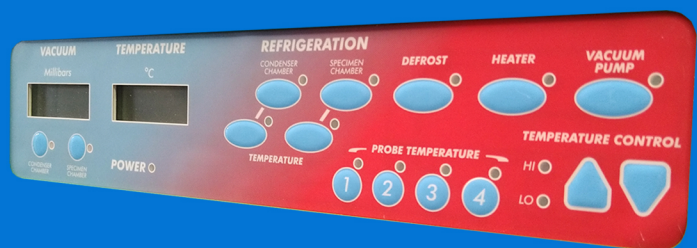
Our automated systems have on-going technical support, as well as remote operation & troubleshooting via a stable internet connection.



- 17" & 19" Screens available
- Anti-scratch, 10 point Multi-touch surface
- Fanless Intel Core i7 CPU
- Mini PCIe expansion slots for WiFi/4G
- 250gb SSD & USB 3.0
- IP65 Front Panel Protection

MANUAL LCD DISPLAY

- LCD Display
- RS232 Application for Data Logging
- Manually operated valve controls
- Step change controls



Manual touch keypad with LCD vacuum & temperature displays as well as manually operated valves. This system is supplied with a RS232 computer application that can log data and control step changes giving it a simplified computer led programmed profile to follow.

The manual system is ideal for slow process freeze-drying, and processes where less user input & information tracking is required. The operating system is updateable with a removable PIC chip, and Frozen in Time provides on-going technical support as required.