

VWR® Ultra-low temperature freezers

01. VWR® ULTRA-LOW TEMPERATURE DOUBLE COOLING FREEZERS

02. VWR® SMART FREQUENCY SERIES

03. VWR® ENERGY SAVING SERIES



VWR® Ultra-low temperature freezers

The VWR® ULT freezers are designed for safe and reliable storage of sensitive samples. Our wide range of freezers offer a host of benefits:

CHOICE - Enough to cover almost every application packed into a series of models with a wide selection of accessories

PERFORMANCE - Market leading consistency and reliability backed up with warranties that run into many years

SUPERIOR ENERGY SAVINGS - Advanced innovative design delivers superior energy savings



WARRANTY
Equipment:
3 YEARS
Compressor:
5 YEARS



VWR® ULTRA-LOW TEMPERATURE DOUBLE COOLING FREEZERS

The VWR® Ultra-low temperature Double Cooling Freezers can be used for the storage and protection of valuable samples which require strict and continuous storage conditions, designed to operate even in the event of a compressor failure. Suitable for viruses, pathogens, blood cells and other biological sample cold storage applications found within hospitals, disease control, research institutions and biomedical engineering. Also used to store special materials and other products within electronics and chemicals industries.

- Smart Full-size 10-inch touch screen with state-of-the-art user interface
- Dual refrigeration systems run independently and alternately, both reaching -80°C, such that if one system fails the other will maintain temperature to ensure sample storage safety.
- High speed refrigeration system for faster pull down and temperature recovery after door opening
- Double foaming for both inner and outer doors and five-layer sealing design and optimized super-thick VIP thermal insulation technology, extends temperature holdover time during power failure and increases insulation efficiency by 30%
- Equipped with key lock, padlock and optional electromagnetic lock, with optional fingerprint lock, providing multiple safeguards for sample safety

	Model	VWRA471-1278	VWRA471-1280
Technical Data	Cabinet Type	Upright	Upright
	Climate Class	N	N
	Cooling Type	Direct cooling	Direct cooling
	Defrost Mode	Manual	Manual
	Refrigerant	HC	HC
	Sound Level (dB(A))	50 - 52	50 53
Performance	Cooling Performance (°C)	-86	-86
	Temperature Range (°C)	-40 to -86	-40 to -86
Control	Controller	Microprocessor	Microprocessor
	Display	LCD Touchscreen	LCD Touchscreen
Electrical Data	Power Supply (V/Hz)	208-230/50/120/60	208-230/50 120/60
	Power (W)	1600/1400	1800 1400
	Electrical Current (A)	10/14	10/14
	Power Consumption (kWh/24h)	10/12	10.5/11
Construction	Capacity (L/Cu.Ft)	578/20.4	728/25.7
	Net/Gross Weight (approx) (kgs)	325/355	350/385
	Interior Dimension (W*D*H)	620*716*1310 mm	766*716*1310 mm
	Exterior Dimension (W*D*H)	895*998*1980 mm	1046*998*1980 mm
	Packing Dimension (W*D*H)	950*1055*2150 mm	1100*1105*2150 mm
Loading Quantities	Container Load (20'/40'/40'H)	12/24/24	10/20/20
Alarms	High/Low Temperature	Y	Y
	Hot Condenser	Y	Y
	Power Failure	Y	Y
	High/Low Voltage	Y	Y
	Sensor Error	Y	Y
	Low Battery	Y	Y
	High Ambient Temperature	Y	Y
	Door Ajar	Y	Y
Accessories Certifications	Caster	Y	Y
	Foot	Y	Y
	Porthole	Y/2	Y/2
	Shelves/Inner Doors	3/4	3/4
	USB Interface	Y	Y
	Remote Alarm (Dry contacts)	Y	Y
	5V Power Supply Port	Y	Y
	Temperature Recorder	Optional	Optional
	RS485 Port	Y	Y
	CO ₂ Backup System	Optional	Optional
	LN ₂ Backup System	Optional	Optional
	CE	Y	Y
	UL	/	/
	ENERGY STAR	Y	Y

Description	Pk	Cat. No.
578L -86°C Upright ULT Freezer Double cooling	1	VWRA471-1278
728L -86°C Upright ULT Freezer Double cooling	1	VWRA471-1280



VWR® ULTRA-LOW TEMPERATURE FREEZERS (SMART FREQUENCY SERIES)

Applicable for products and samples which require strict storage conditions such as viruses, pathogens, red blood cells, white blood cells, skin, bones, bacteria, semen, biological products, electronics and special materials. Suitable for long term storage applications and compliant with typical storage requirements found in hospitals, disease control and prevention centres, scientific research institutions biomedical engineering institutes, agriculture/ fishery companies as well as the electronics and chemical industry.

- Smart Full-size 10-inch touch screen with state-of-the-art user interface
- HC & Variable Frequency Drive Refrigeration System for Additional Energy Saving Advanced innovative design delivers superior energy savings.
- Advanced innovative design delivers superior energy savings. The energy consumption is down to a single digit.
- Check the real-time operating status via mobile phones or portable tablet, simple and reliable.
- Double foaming for both inner and outer doors and five-layer sealing design and optimized super-thick VIP thermal insulation technology, extends temperature holdover time during power failure and increases insulation efficiency by 30%

Description	Pk	Cat. No.
729L -86°C Upright ULT Freezer Smart Frequency	1	VWRA471-1281
829L -86°C Upright ULT Freezer Smart Frequency	1	VWRA471-1283
959L -86°C Upright ULT Freezer Smart Frequency	1	VWRA471-1284

	Model	VVRA471-1281	VVRA471-1283	VVRA471-1284
Technical Data	Cabinet Type	Upright	Upright	Upright
	Climate Class	N	N	N
	Cooling Type	Direct Cooling	Direct Cooling	Direct Cooling
	Defrost Mode	Manual	Manual	Manual
	Refrigerant	HC	HC	HC
	Sound Level (dB(A))	43,5	43,5	47
Performance	Cooling Performance (°C)	-86	-86	-86
	Temperature Range (°C)	-40 to -86	-40 to -86	-40 to -86
Control	Controller	Microprocessor	Microprocessor	Microprocessor
	Display	LCD Touchscreen	LCD Touchscreen	LCD Touchscreen
Electrical Data	Power Supply (V/Hz)	100-230/50/60	208-230/50/60	208-230/50/60
	Power (W)	1100	1100	1300
	Electrical Current (A)	6	6	7
	Power Consumption (kWh/24h)	8	8.2	9.8
Construction	Capacity (L/Cu.Ft)	729/25.7	829/29.2	959/33.9
	Net/Gross Weight (approx) (kgs)	350/385	380/415	450/485
	Interior Dimension (W*D*H)	766*716*1310 mm	870*716*1310 mm	1016*716*1310 mm
	Exterior Dimension (W*D*H)	1046*998*1980 mm	1145*998*1980 mm	1296*998*1980 mm
	Packing Dimension (W*D*H)	1100*1105*2150 mm	1190*1045*2150 mm	1365*1105*2150 mm
Loading Quantities	Container Load (20'/40'/40'H)	10/20/20	9/20/20	8/16/16
Alarms	High/Low Temperature	Y	Y	Y
	Hot Condenser	Y	Y	Y
	Power Failure	Y	Y	Y
	High/Low Voltage	Y	Y	Y
	Sensor Error	Y	Y	Y
	Low Battery	Y	Y	Y
	High Ambient Temperature	Y	Y	Y
	Door Ajar	Y	Y	Y
Accessories Certifications	Caster	Y	Y	Y
	Foot	Y	Y	Y
	Porthole	Y/2	Y/2	Y/2
	Shelves/Inner Doors	3/4	3/4	3/4
	USB Interface	Y	Y	Y
	Remote Alarm (Dry contacts)	Y	Y	Y
	5V Power Supply Port	Y	Y	Y
	Temperature Recorder	Optional	Optional	Optional
	RS485 Port	Y	Y	Y
	CO ₂ Backup System	Optional	Optional	Optional
	LN ₂ Backup System	Optional	Optional	Optional
	CE	Y	Y	Y
	UL	Y	Y	Y
	ENERGY STAR	Y	Y	Y



VWR® ULTRA-LOW TEMPERATURE FREEZERS (ENERGY SAVING J SERIES)

This product line is designed and manufactured for long term storage of various biological products, including viruses, germs, erythrocytes and leucocytes. Applications can be found in blood banks, hospitals, epidemic prevention services, research institutes, biological engineering institutes, laboratories in electronic and chemical plants.

Suitable for clinical, medical, scientific research, quarantine, and other departments to store items under low temperature conditions. Applicable for universities, hospitals, disease prevention and control centres, blood stations, scientific research institutes, electronics and chemical enterprise laboratories and biomedical engineering research institutes. For storage of biological products and biological samples such as red and white blood cells, viruses, bone and bacteria. Also used for electronic devices and other materials used for cryogenic tests.

- Special V-I-P (Vacuum Insulation Panel) insulation system reduces the heat gain by 25%, High efficiency HC refrigeration system improves the overall efficiency by 45%
- Microprocessor-controlled system designed for controllable range of -40°C to -86°C for cabinet space with 1°C increment
- Large LED display for cabinet temperature, set temperature, ambient temperature, and input voltage
- Patented cabinet insulation system designed for optimal performance of cold
- storage temperature and minimal frost buildup

Description	Pk	Cat. No.
100L -86°C Upright ULT Freezer	1	VWRA471-1274
388L -86°C Upright ULT Freezer	1	VWRA471-1275
490L -86°C Upright ULT Freezer	1	VWRA471-1276
578L -86°C Upright ULT Freezer	1	VWRA471-1277
728L -86°C Upright ULT Freezer	1	VWRA471-1279
828L -86°C Upright ULT Freezer	1	VWRA471-1282

	Model	VWRA471-1274	VWRA471-1275	VWRA471-1276 (Double Door)	VWRA471-1277	VWRA471-1282	VWRA471-1282
Technical Data	Cabinet Type	Upright	Upright	Upright	Upright	Upright	Upright
	Climate Class	N	N	N	N	N	N
	Cooling Type	Direct cooling	Direct cooling	Direct cooling	Direct cooling	Direct cooling	Direct cooling
	Defrost Mode	Manual	Manual	Manual	Manual	Manual	Manual
	Refrigerant	HC	HC	HC	HC	HC	HC
	Sound Level (dB(A))	46,8	50	50	50	50	50
Performance	Cooling Performance (°C)	-86	-86	-86	-86	-86	-86
	Temperature Range (°C)	-40 to -86	-40 to -86	-40 to -86	-40 to -86	-40 to -86	-40 to -86
Control	Controller	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor
	Display	LED	LED	LED	LED	LED	LED
Electrical Data	Power Supply (V/Hz)	220-240/50	220-240/50	220-240/50	220-240/50	220-240/50	220-240/50
	Power (W)	680	900	900	900	1000	1000
	Electrical Current (A)	3	7.5	8	8	10	10
	Power Consumption (kWh/24h)	5.5	9.5	11,5	10	10,5	12
Construction	Capacity (L/Cu.Ft)	100/3.5	388/13.7	490/17.3	578/20.4	728/25.7	828/29.2
	Net/Gross Weight (approx) (kgs)	108/132	255/286	295/335	300/330	345/385	380/410
	Interior Dimension (W*D*H)	330*481*630 mm	465*716*1310 mm	590*630*1310 mm	620*716*1310 mm	766*716*1310 mm	870*716*1310 mm
	Exterior Dimension (W*D*H)	770*660*810 mm	830*980*1980 mm	873*900*1980 mm	903*980*1960 mm	1049*980*1980 mm	1145*980*1980 mm
	Packing Dimension (W*D*H)	32*28*38.5 mm	893*1078*2135 mm	925*985*2150 mm	950*1055*2125 mm	1090*1050*2150 mm	1190*1045*2150 mm
Loading Quantities	Container Load (20'/40'/40'H)	44/88/88	12/26/26	12/24/24	12/24/24	10/22/22	9/20/20
Alarms	High/Low Temperature	Y	Y	Y	Y	Y	Y
	Hot Condenser	Y	Y	Y	Y	Y	Y
	Power Failure	Y	Y	Y	Y	Y	Y
	High/Low Voltage	Y	Y	Y	Y	Y	Y
	Sensor Error	Y	Y	Y	Y	Y	Y
	Low Battery	Y	Y	Y	Y	Y	Y
	High Ambient Temperature	Y	Y	Y	Y	Y	Y
	Door Ajar	Y	Y	Y	Y	Y	Y
Accessories Certifications	Caster	Y	Y	Y	Y	Y	Y
	Foot	Y	Y	Y	Y	Y	Y
	Porthole	Y/1	Y/2	Y/2	Y/2	Y/2	Y/2
	Shelves/Inner Doors	1/2	3/2	3/4	3/4	3/4	3/4
	USB Interface	Y	Y	Y	Y	Y	Y
	Remote Alarm (Dry contacts)	Y	Y	Y	Y	Y	Y
	5V Power Supply Port	Y	Y	Y	Y	Y	Y
	Temperature Recorder	/	Optional	Optional	Optional	Optional	Optional
	RS485 Port	-/Y	Optional	Optional	Optional	Optional	Optional
	CO ₂ Backup System	Optional	Optional	Optional	Optional	Optional	Optional
	LN ₂ Backup System	Optional	Optional	Optional	Optional	Optional	Optional
	CE	Y	Y	Y	Y	Y	Y
	UL	/	Y	Y	/	/	/
ENERGY STAR	/	Y	Y	/	/	/	

ACCESSORIES

Description	Cat. No.
CO ₂ Backup System built in version (factory option)	VWRA471-1285
LN ₂ Backup System built in version (factory option)	VWRA471-1286
CO ₂ Backup System	VWRA471-1287
LN ₂ Backup System	VWRA471-1288
Electromagnetic lock	VWRA471-1289
Fingerprint lock	VWRA471-1290
Shelf suitable for VWRA471-1275	VWRA471-1291
Shelf suitable for VWRA471-1276	VWRA471-1292
Shelf suitable for VWRA471-1277, VWRA471-1278	VWRA471-1293
Shelf suitable for VWRA471-1284	VWRA471-1295
Shelf suitable for VWRA471-1279, VWRA471-1281	VWRA471-1296
Shelf suitable for VWRA471-1282, VWRA471-1283	VWRA471-1297
Circular temperature chart recorder	VWRA471-1298



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