

# Ultralow temperature freezer-DFUD

## Upright type double door with double controller

### Product features and specifications

- Creative upright type double door freezer by OPERON which is independently controlled
- Independent temperature adjustment and space usage according to the characteristics of samples
- To keep samples which are used frequently in the upper chamber, and to keep samples which need long-term preservation in the lower chamber
- More stable temperature with triple silicon gasket of the upper and the lower chambers
- Four inner doors which are two in the upper chamber and two in the lower chamber and two outer doors in the upper and the lower chamber



### Ultralow temperature freezer(Double door / Double controller freezer)

Model	DFUD-558						DFUD-657						DFUD-740					
	AA	BB	CC	AB	AC	BC	AA	BB	CC	AB	AC	BC	AA	BB	CC	AB	AC	BC
Temperature in the upper chamber	-40°C	-55°C	-86°C	-40°C	-40°C	-55°C	-40°C	-55°C	-86°C	-40°C	-40°C	-55°C	-40°C	-55°C	-86°C	-40°C	-40°C	-55°C
Temperature in the lower chamber	-40°C	-55°C	-86°C	-55°C	-86°C	-86°C	-40°C	-55°C	-86°C	-55°C	-86°C	-86°C	-40°C	-55°C	-86°C	-55°C	-86°C	-86°C
External size	W1010 x D900 x H1990						W1010 x D1030 x H1950						(OUT)W1010 x D1010 x H2047					
Internal size	(W750 x D620 x H550) x 2						(W750 x D770 x H530) x 2						(W750 x D880 x H535) x 2					
Inside measurement	511L						612L						706L					
Door (inside/outside)	4/2						4/2						4/2					
Electric capacity	Capacity necessary for installment AC220V 1ph (50/60Hz)																	
Weight	420kg						430kg						450kg					

## Upright type double door with single controller

It is an upright type double door freezer to minimize the cold air loss when taking out samples. As samples which are used frequently are kept in the upper chamber and samples which need a long-term preservation are kept in the lower chamber, it affects the temperature of other samples less.

### Control system

- Micro processor control system /Digital temperature indicator which adjust the temperature by 0.1°C
- Functions for setting double passwords to prevent access or control except administrators
- Data locking function

### Alarm system and safety devices

- Alarm for filter cleaning period (Warm Condenser alarm)
- Alarm for high/low temperature of sight and auditory
- Equipped with pressure switch
- Equipped with overheating prevention switch
- Auto return system after blackout



### Ultralow temperature freezer(Double door / Single controller freezer)

Model	DFUD-374			DFUD-446			DFUD-558			DFUD-657			DFUD-740		
	AE	BE	CE	AE	BE	CE	AE	BE	CE	AE	BE	CE	AE	BE	CE
Temperature range	-40°C	-55°C	-86°C	-40°C	-55°C	-86°C	-40°C	-55°C	-86°C	-40°C	-55°C	-86°C	-40°C	-55°C	-86°C
External size	W860 x D800 x H1951			W860 x D900 x H1951			W1010 x D900 x H1901			W1010 x D990 x H1901			W1010 x D1010 x H2001		
Internal size	W600 x D520 x H1200			W600 x D620 x H1200			W750 x D620 x H1200			W750 x D730 x H1200			W750 x D750 x H1300		
Inside measurement	374L			446L			558L			657L			731L		
Electric capacity	Capacity necessary for installment AC220V 1ph (50/60Hz)														
Weight	370kg			380kg			400kg			415kg			445kg		

### Options

Rack / Box / CO2 Backup system / LCD touch screen with SD card(or USB) - Basic -1channel (sensor 3channel, 6channel options) / U-system (remote alarm system and wireless control system – telecommunication subscription needed) / Automatic voltage regulator / Cryogenic gloves / Battery backup (Control panel and alarm) / Recorder / VIP / ※The minimum temperature of ultralow temperature freezer(C-type) is supplied with -91°C performance if the customer requests.