# Freeze dryer-MPS

# Multi purpose system

# Features and advantages

- The size and weight of the device is very compact, and it can be used as both cold trap & freeze dryer and freeze dryer & mini concentrator, and it can be connected with vacuum oven or gel dryer to dry small amount of samples.
- Selected vacuum pump contains automatic Gas Ballasting function, so it releases gas which fills the pump to get better degree of vacuum.
- Embedded vacuum release valve automatically operates to prevent a back flow of contaminated oil and gas in the pump when blackout, cold trap temperature rise or pump operation stop by mishandling.
- It is equipped with automatic protection function for the vacuum pump which makes the vacuum pump operates automatically when the temperature of the cold trap decreases below the certain temperature which the user sets regarding the freezing point of samples and the vacuum pump automatically turns out when the temperature increases over the setting temperature.



[MPS-5502]



#### MPS-55 (Multi Purpose System)

Dimension(WxDxH)	W345 x D474 x H540	Chamber	Stainless steel
Lowest temperature	-55°C	Drain	Silicon hose
Cold trap lid	Clear acrylic lid	Vacuum connector	ld-10mm/od-19mm
Trap chamber volume(total)	2 ~ 3 L	Defrost	Manual
Optional manifold	6port with valve	Display	LED/0.1°C increment
Weight	about 29kg (optional manifold -4kg)		

# MPS-70 (Multi Purpose System)

Dimension(WxDxH)	W345 x D474 x H540	Chamber	Stainless steel
Lowest temperature	-70°C	Drain	Silicon hose
Cold trap lid	Clear acrylic lid	Vacuum connector	ld-10mm/od-19mm
Trap chamber volume(total)	2 ~ 3 L	Defrost	Manual
Optional manifold	6port with valve	Display	LED/0.1°C increment
Weight	about 29kg (optional manifold -4kg)		

# MPS-86 (Multi Purpose System)

Dimension(WxDxH)	W345 x D474 x H540	Chamber	Stainless steel
Lowest temperature	-86°C	Drain	Silicon hose
Cold trap lid	Clear acrylic lid	Vacuum connector	ld-10mm/od-19mm
Trap chamber volume(total)	2 ~ 3 L	Defrost	Manual
Optional manifold	6port with valve	Display	LED/0.1°C increment
Weight	about 29kg (optional manifold -4kg)		

# MSVQ-20 (Mini Speed Vacuum Concentrator)

Dimension(WxDxH)	W213 x D335 x H223	Chamber	SUS with Teflon coating
Rotor	1.5ml x 20hole(Anodizing)	Lid	Clear acrylic lid
Speed control	0 - 2000rpm	Centrifuge	Max.2000 rpm
Heat control	Amb. +5°c ~ +65°c	Vacuum connector	id-10mm/od-19mm
Vacuum Gauge	0 ~ 76cmHg	Rotor safety	Speed control (0 = off)