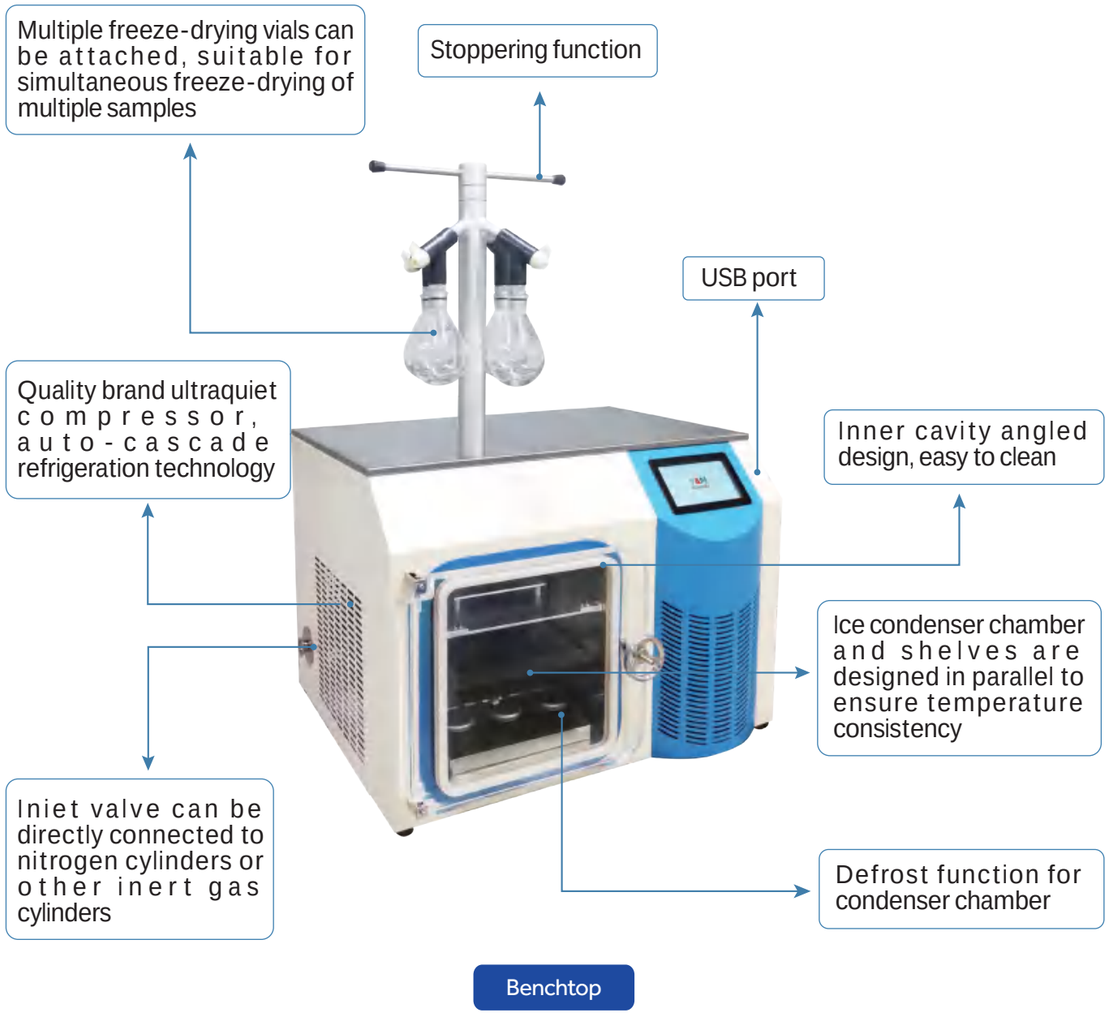
Configuration-Pilot Scale



Benchtop



Floor Stand

1. T type hydraulic rod
2. PLC controller
3. Drying chamber (freezing and drying)
4. PT 100 sensor
5. Dust cover
6. Acrylic glass door
7. Condenser chamber
8. Vacuum tube
9. Material loading shelf

Pilot Scale -Benchtop



CTFD-10ES



CTFD-10ET



CTFD-10EP



CTFD-10EPT

Pilot Scale - Floor Stand



CTFD-20S
CTFD-30S
CTFD-50S
CTFD-100S



CTFD-20T
CTFD-30T
CTFD-50T
CTFD-100T



CTFD-200S



CTFD-200T

Product Parameters

Model		CTFD-10ES	CTFD-10EP	CTFD-10ET	CTFD-10EPT
Basic Information	Type	Standard chamber	4 port manifold	Standard chamber	Standard chamber with 4 port manifold
	Minimum Condenser Temp (°C)	-88			
	Shelf Temp (°C)	-60~ +70			
	Temperature Uniformity (°C)	±1			
	Vacuum Degree (Pa)	≤0.1			
	Condenser Volume (L)	11			
	Freeze Drying Area (m^2)	0.1			
	Condensing Capacity (Kg/24h)	3			
	No of Shelves	1			
	Drying Chamber Volume (L)	40			
	Material Loading Capacity (mL)	3000			
	Penicillin Bottle φ22	216			
	Penicillin Bottle φ16	400			
	Penicillin Bottle φ12	726			
	Manifold	/	4 pieces	/	4 pieces
	USB Interface	Standard			
	Drying Chamber (standard)	Transparent acrylic			
	Vacuum Pump	Standard model: VRD-8*			
	Control System	Micrprocessor, touch screen			
Electrical Requirement	Electrical Voltage	220V			
	Electrical Frequency	50Hz, 60Hz			
	Power (Kw)	2.3			
Size Information	Condenser Chamber Dimensions (φ*H)(mm)	300*438*320			
	Shelf Specifications (W*D*H)(mm)	270*400*150		270*400*120	
	Exterior Dimensions (W*D*H)(mm)	820*695*600/995		820*695*875/1075	
Package Information	Host Package (W*D*H)(mm)	940*840*990			
	Vacuum Pump Package Dimensions (W*D*H)(mm)	600*230*300			
	Weight (Kg)	157	165	165	170

Product Parameters

Model		CTFD-20S	CTFD-20T	CTFD-30S	CTFD-30T	CTFD-50S
Basic Information	Type	Standard	Standard	Standard	Standard	Standard
	Shelf Temp (°C)	-50~ 70	-50~ 70	-50~ 70	-50~ 70	-50~ 70
	Final Condenser Temp Range (°C)	-80	-80	-80	-80	-80
	Vacuum Degree (Pa)	＜10	＜10	＜10	＜10	＜10
	Condenser Volume (L)	13	13	13	13	17
	Freeze Drying Area (m^2)	0.24	0.24	0.36	0.36	0.5
	Condenser Capacity (Kg/24h)	6.5	6.5	6.5	6.5	10
	Shelf Spacing (mm)	145	145	90	90	90
	Liquid Material Loading Capacity (L)	4.5	4.5	7	7	10
	Temperature Uniformity (°C)	±1	±1	±1	±1	±1
	Cooling Mode	Air cooling	Air cooling	Air cooling	Air cooling	Air cooling
	Defrost Function for Condenser Chamber	Y	Y	Y	Y	Y
	Cap Seal Method	N	Hydraulic pressure	N	Hydraulic pressure	N
	Vacuum Pump	Standard model: BSV-30; Speed: 8.3L/S				
	Maximum Vacuum Pressure	≤10	≤10	≤10	≤10	≤10
	Noise (dB)	＜80	＜80	＜80	＜80	＜80
Electrical Requirements	Electrical Voltage	220V or 380V		380V		380V
	Electrical Frequency	50Hz, 60Hz		50Hz, 60Hz		50Hz, 60Hz
	Power (Kw)	3	3.5	3	3.5	6
Size Information	Condenser Chamber Dimensions (φ*H)(mm)	240*307		240*307		248*356
	Drying Chamber Dimensions (W*D*H)(mm)	470*495*415		470*495*415		470*558*550
	Exterior Dimensions (W*D*H)(mm)	1339*932*1319	1339*932*1601	1339*932*1319	1339*932*1601	1337*1015*1454
	Shelf Dimensions (L*W*H)(mm)	300*400*20		395*335*15		300*450*20
	No. of Shelves	2+1	2+1	3+1	3+1	4+1
	Penicillin Bottle φ22	468	468	702	702	1040
	Penicillin Bottle φ16	864	864	1296	1296	1944
	Penicillin Bottle φ12	1584	1548	2376	2376	3456
	Host Net Weight (Kg)	380	425	400	445	520
Package Information	Host Package (W*D*H)(mm)	1490*1140*1660				1660*1260*1710
	Vacuum Pump Package (W*D*H)(mm)	850*330*450				850*330*450
	Weight (Kg)	550	600	580	630	690

Model		CTFD-50T	CTFD-100S	CTFD-100T	CTFD-200S	CTFD-200T
Basic Information	Type	Top-press	Standard	Top-press	Standard	Top-press
	Shelf Temp (°C)	-50~ 70	-50~ 70	-50~ 70	-50~ 70	-50~ 70
	Final Condenser Temp Range (°C)	-80	-80	-80	-80	-80
	Vacuum Degree (Pa)	＜10	＜10	＜10	＜10	＜10
	Condenser Volume (L)	17	35	35	90	90
	Freeze Drying Area (m^2)	0.5	1	1	2	2
	Condenser Capacity (Kg/24h)	10	15	15	40	40
	Shelf Spacing (mm)	90	90	90	100	100
	Liquid Material Loading Capacity (L)	10	20	20	40	40
	Temperature Uniformity (°C)	±1	±1	±1	±1	±1
	Cooling Mode	Air cooling	Air cooling	Air cooling	Air cooling	Air cooling
	Defrost Function for Condenser Chamber	Y	Y	Y	Y	Y
	Cap Seal Method	Hydraulic pressure	N	Hydraulic pressure	N	Hydraulic pressure
	Vacuum Pump	Standard model: BSV-30; Speed: 8.3L/S	Standard model: BSV-60; Speed: 16.7L/S			
	Maximum Vacuum Pressure	≤10	≤10	≤10	≤10	≤10
	Noise (dB)	＜80	＜80	＜80	＜80	＜80
Electrical Requirements	Electrical Voltage	380V	380V		380V	
	Electrical Frequency	50Hz, 60Hz	50Hz, 60Hz		50Hz, 60Hz	
	Power (Kw)	6.5	9.5	10	14.5	15
Size Information	Condenser Chamber Dimensions (φ*H)(mm)	248*356	300*507		360*910	
	Drying Chamber Dimensions (W*D*H)(mm)	470*558*550	640*695*550		680*895*820	
	Exterior Dimensions (W*D*H)(mm)	1337*1015*1754	1633*1027*1612	1633*1027*1912	1260*3710*2076	1260*3710*2476
	Shelf Dimensions (L*W*H)(mm)	300*450*20	550*480*20		600*600*20	
	No. of Shelves	4+1	4+1	4+1	6+1	6+1
	Penicillin Bottle φ22	1040	2016	2016	4100	4100
	Penicillin Bottle φ16	1944	3944	3944	7800	7800
	Penicillin Bottle φ12	3456	7020	7020	14400	14400
	Host Net Weight (Kg)	565	655	700	2000	2050
Package Information	Host Package (W*D*H)(mm)	1660*1260*1710	1960*1340*1860		1600*1550*2400 1600*2050*2400	
	Vacuum Pump Package (W*D*H)(mm)	850*330*450	1010*340*510		vacuum pumps are not individually packaged	
	Weight (Kg)	740	900	950	2300	2400