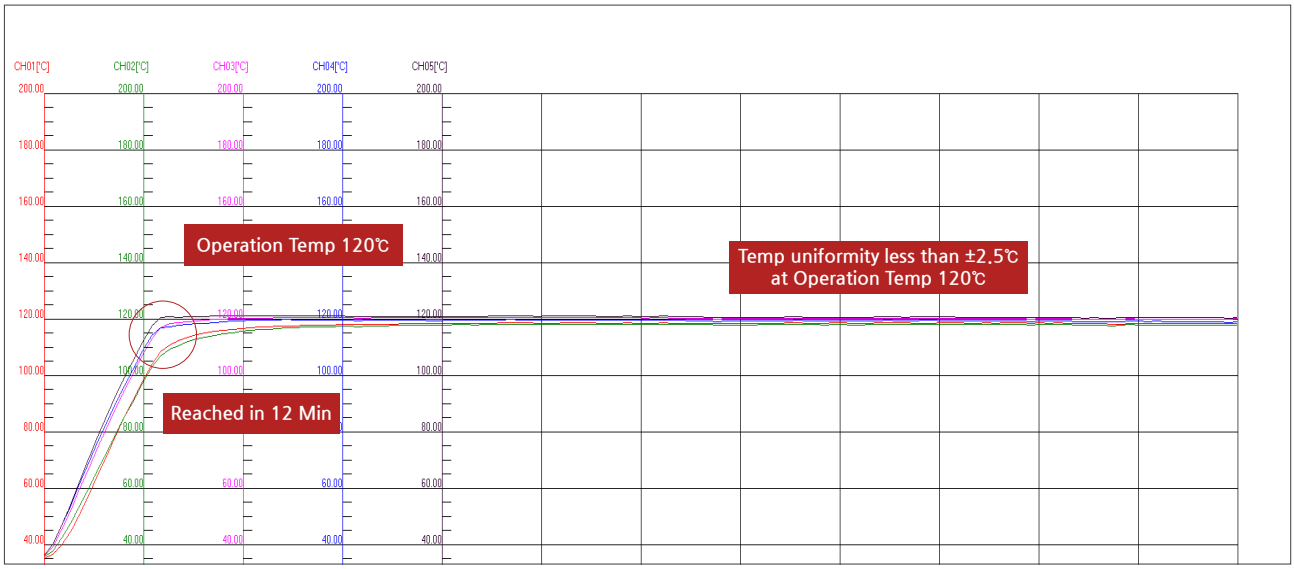
Industrial Drying Oven -Feature

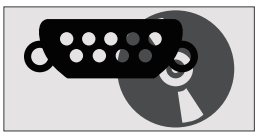
This version of the forced convection drying oven is used for a variety of industrial applications including drying, curing or baking components, parts or final products. The Industrial Drying Oven takes advantage of its capability to work on heavy duty samples. It is specially designed to operate on bulk samples or large amounts of test pieces. Our Industrial Drying Oven is equipped with a powerful circulation fan, electronically safe circuits and efficient carts.

Uniformity Sheet

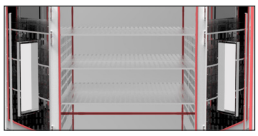


Feature


View window

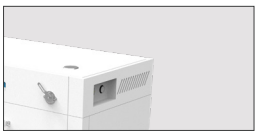

RS-485
or
RS-232C interface


Digital PID controller


Stainless steel

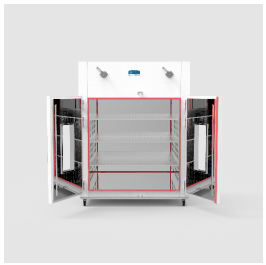

Steel plate with powder
heating coated


Leveling caster


Safety devices


Door sealing gasket

Industrial Drying Oven



Model	SH-IDO-864FG	SH-IDO-1152FG
Air Circulation type	Forced	
Temp Range	Ambient +10℃ to 200℃ (Ambient +18℉ to 392℉)	
Time Range	00.00 to 99HR 59MIN (MIN SEC) Selectable Digital Counter Timer	
Temp &Time controller	Microprocess P I D Membrane Touch Digital controller	
Heater Capa	7 KW	9 KW
Dimension Internal (W×D×H)	900×800×1200mm	1200×800×1200mm
	35.43x31.50x47.24''	47.24x31.50x47.24''
Dimension External (W×D×H)	1160x1000x1870mm	1480x1013x1948mm
	45.67x39.37x73.62''	58.27x39.88x76.69''
Weight	295 kg	415 Kg
Capa	864 L	1152 L
Material Internal	Stainless Steel	
Material External	Steel Plate With Powder Heating Coated	
Shelves	3EA Supplied (Only A type Shelve, Maximum 38EA)	3EA Supplied (A type shelve, Maximum 38EA) 6EA Supplied (B type shelve, Maximum 76EA)
Electrical Requirements 230V ,50/60Hz, 3Φ	17.6 A	22.6 A
Cat. No.	IDO864FG230-3	IDO1152FG230-3
Electrical Requirements 380V,50/60Hz, 3Φ	10.6 A	13.7 A
Cat. No.	IDO864FG380-3	IDO1152FG380-3

• Accessory

-Movable stainless steel plate
864FG
(3EA Supplied, Only A type Shelve)
1152FG, 2250FG,3612FG
(3EA Supplied, A type shelve)
(6EA Supplied, B type shelve)

• Option

-Programmable controller
-Digital recorder
-2CH Hybrid recorder
-Moving Cart & Room cart
(C type shelve)
-RS-485 interface
-RS-232C interface

• Safety Device

-Automatic reset function incoming power cut
-Buzzer on when set time arrived
-Fan motor overload protection
-Electric leakage breaker
-Over temperature alarm
-High temp limit controller

※We accept custom-made order.

Industrial Drying Oven

CE

Model	SH-IDO-2250FG	SH-IDO-3612FG
Air Circulation type	Forced	
Temp Range	Ambient +10℃ to 200℃ (Ambient +18℉ to 392℉)	
Time Range	00.00 to 99HR 59MIN (MIN SEC) Selectable Digital Counter Timer	
Temp &Time controller	Microprocess P I D Membrane Touch Digital controller	
Heater Capa	18 KW	23 KW
Dimension Internal (W×D×H)	1600×930×1500mm	2150×1120×1500mm
	62.99x36.61x59.06''	84.65x44.09x59.06''
Dimension External (W×D×H)	2300×1145×2090mm	2850x1335x2090mm
	90.55x45.08x82.28''	112.20x52.56x82.28''
Weight	570 Kg	780 Kg
Capa	2232 L	3612 L
Material Internal	Stainless Steel	
Material External	Steel Plate With Powder Heating Coated	
Shelves	3EA Supplied (A type shelve, Maximum 48EA)/ 6EA Supplied (B type shelve, Maximum 96EA)	
Electrical Requirements 230V ,50/60Hz, 3Φ	45.2 A	57.7 A
Cat. No.	IDO2250FG230-3	IDO3612FG230-3
Electrical Requirements 380V,50/60Hz, 3Φ	27.3 A	34.9 A
Cat. No.	IDO2250FG380-3	IDO3612FG380-3

• Accessory

-Movable stainless steel plate
864FG
(3EA Supplied, Only A type Shelve)
1152FG, 2250FG,3612FG
(3EA Supplied, A type shelve)
(6EA Supplied, B type shelve)

• Option

-Programmable controller
-Digital recorder
-2CH Hybrid recorder
-Moving Cart & Room cart
(C type shelve)
-RS-485 interface
-RS-232C interface

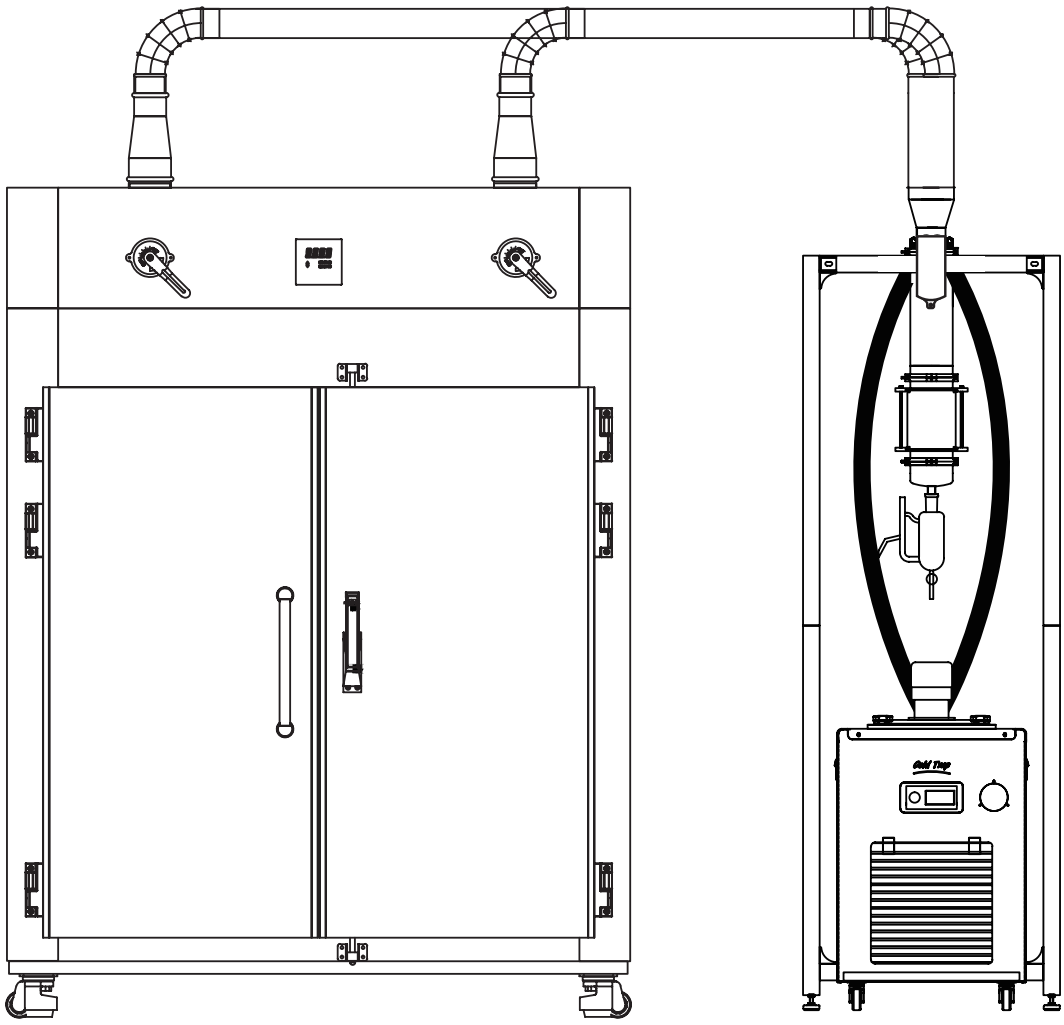
• Safety Device

-Automatic reset function incoming power cut
-Buzzer on when set time arrived
-Fan motor overload protection
-Electric leakage breaker
-Over temperature alarm
-High temp limit controller

※We accept custom-made order.

Trap For Oil Collection

Application Lay-out



Model	SH-Terpene
Trap Dimension (WxDXH)	254x102x1080mm / 10x4x42.5"
Frame Dimension (WxDXH)	660x610x1803mm / 26x24x71"
Condenser surface area	Stainless Steel 4730㎠
Construction	Stainless steel & borosilicate condensate sight glass & borosilicate terpene/hydrosol separator
Application	Collection Oil & Terpenes & Hydrosol from decarboxylation ovens
Intake	Φ75
Exhaust	Φ75
Drain	1.5" tri clamp (1.5" tri clamp to 3/8" hose barb and to 24/40 glass joint adapters included)
Working fluid	40/60 Glycol/Water mixture
Chiller	SH-5CDR(-30)

Programmable Controller

Options

- High Accuracy(±0.1%) with excellent Function
- Multi Input : TC, RTD, DCV
- Simultaneous and Multi output available in Max 4 Points
- Easy parameter and value setting
- Function to protect over shoot
- RUN/STOP Function in the external Input contact point
- Display of Running status in Auxiliary Output
- Large Program Capacity : 2 Patterns / 30 Segments
- Variety of Auxiliary Output available (ex IS, TS, PEND etc)
- Input Piece Bias Function(Max 4 zone)
- Automatic PID Parameter Calculation
- Variety of communication Protocols
- Reliable quality(CE, CUL, ISO applied)

Display	Size(WxHxL)	96x96x68mm(3.8x3.8x2.68'') / 72x72x68mm(2.83x2.83x2.68'')
	PV/SP Display	4 Digit
Operation Mode		Program / Reset, 2 Zone PID
Control Mode		1CH Control
Max Channel		-
Pattern & Segments		2 Pattern / Max 30 segments
Input	TC	K, J, E, T, R, B, S, L, N, U, W, C, Platinel II
	RTD	Pt100Ω, JPt100Ω
	Analog Voltage Input	-10~20mV, 0~100mV, 0.4~2.0V DC, 1~5V DC, 0~10V DC
Output	Control Output	RELAY, SSR(Voltage Pulse)
	Current Output	4 ~ 20mA DC
	Voltage Output	-
	Transmission Output	4 ~ 20mA (PV, SP, MV)
Digital Input	Contact Type	2 Points / 4 Types(RUN, HOLD, STEP, RESET)
	Contact capacity	-
Digital Output	Relay	Normal Open 30V DC A, 250V AC 1A Normal Close 30V DC3A 250V AC 3A
	Open Collector	ON voltage across contacts at less than 2V, the leakage current less than 100㎂
Sampling Time		250ms
Accuracy		±0.1% ±1% digit of Full Scale
Event	Alarm	1 Point / Max 3 Points(20 Types)
	Inner Signal	2 Points (PV, SP, TSP)
	Time Signal	1 Point
	Other	1 Point (RUN, Pattern END, UP, DOWN, SOAK)
Communication	Interface	RS485
	Protocol	PC-Link, MODBUS(ASCII, RTU), SYNC(Master, Slave)
	Speed	Max 115,200 bps
Power	Power	100 ~ 240V AC, 50 ~ 60Hz
	Power Consumption	Max 10W
Operating environment		-
Weight		-

Digital Recorder
Options

- Touch panel 5.7 Inch 640 x 480 TFT-LCD
- Universal input (Thermocouple, RTD, VDC)
- Trend view mode available
- 80MB internal memory and support SD/SDHC memory card
- RS 485/422 communication (Modbus, PC-link)

Number of channels	2, 4, 8, 12 (Refer to the type configuration)
Input type	2 thermoresistors (Pt-100, KPt-100) 12 thermocouples (K, J, E, T, R, B, S, L, N, U, Wre 5-26, PL-II) 4 VDC (-10 - 20 mV, 0 - 100 mV, 1 - 5V, 0 - 30 V)
Sampling period	250 ㎳
Current to measure the thermoresistor (RTD)	About 0.21 ㎃
Input resistor	Thermocouple : More than 1 ㏁, VDC : More than 1 ㏁
Degree	±0.15 % of F.S, ±1 digit (Except the RJC temperature error) ※ Refer to the input table
The error in the reference junction compensation (RJC)	±2.0 ℃ (0 ~ 50 ℃)
Sensor short detection (Burn-out)	UP-Scale for the short

Hybrid Recorder
Options

- 50mm thermal transfer method of paper recorder
- Data logger functions for recording without paper
- Supports RS485 communication and dedicated communication port to set or monitor parameters in real-time by PC/PLC
- Multi-input with high accuracy 0.2% level (RTD, TC, Analog)
- 2-channel simultaneous recording in graphic mode and digital mode
- High visibility and easy setting by LCD dot matrix
- Supports various option I/O functions
- Small size(W96×H96×L100mm / 3.78x3.78x3.94''), light weight

Record accuracy		±0.5%F.S.
Alarm output		CH1(AL1, AL2), CH2(AL1, AL2) Relay out put(250 VAC/30 VDC 3 A 1 a)
Alarm output hysteresis		ON/OFF interval setting for alarm output: 1 to 999digit variable
Communication output		RS485 communication output(Modbus RTU protocol)
Set method		Setting by front keys
Sampling cycle		500 ms/channel x 2 channels = 1000 ms
Print	Method	Direct thermal line print
	Resolution	8 dot/mm
	Dots	384 dot/Line
	Life cycle	50 km
Environment	Ambient temperature	0 to 50 ℃, storage: -20 to 60 ℃
	Ambient humidity	35 to 85%RH, storage: 35 to 85%RH
Approval		CE
Unit weight		Approx. 700 g