

Vacuum Oven

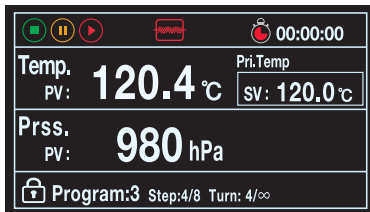
New design for enhanced operability and reliability



VOS-452SD

VOS-602SD (stand included)

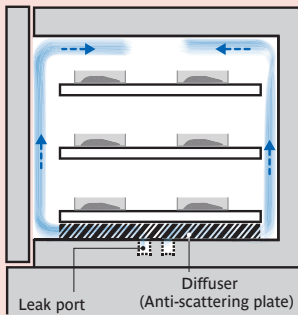
Screen display



The bright, easy-to-read 4.3-inch color LCD improves operability and visibility. The screen digitally displays the chamber internal temperature as well as the vacuum in 1hPa increments.

Point Prevents contamination by suppressing the scattering of powder and fine particles

Side view



Anti-scattering plates are installed at the bottom of the chamber. This plate suppresses scattering of powder samples at the time of vacuum release, thereby preventing contamination. The powder sample scattering control capability can be further improved by attaching the slow leak tube.



Model VOS-602SD is equipped with a dedicated stand. A slide base is installed on the stand, making it easier to change the oil of the oil rotary vacuum pump.

※Performance values are based on a room temperature of 20°C, rated power supply voltage, 50 Hz, and no load. ※The elapsed time to reach temperature is measured on the surface of the chamber under decompression state. ※The recorder output terminal outputs the temperature or pressure value. They can be set on the control panel. ※The upper limit of the temperature control range can be changed to 240°C by using the optional Viton® Door Gasket (Cat No. 278860 only for Model VOS-452SD).

Less scattering and less contamination of samples

- This product is designed to prevent contamination by suppressing scattering of fine particles inside the chamber (see the Point below).
- By improving the exhaust line structure, the time to attain vacuum when decompressing from atmospheric pressure to high vacuum is shortened compared to conventional models.
- Temperature can be measured even in a vacuum. Up to 10 sensors can be inserted for validation (Sensor and recorder are optional) (Continuous operation for 24 hours or more is not possible with sensors inserted).
- It is equipped with program functions. Timer functions (auto start, auto stop), 2-step repetitive operation, 8-step operation, 24-hour cycle operation, etc. are available.
- Temperature output and USB connection terminal are equipped as standard and allow a remote control from PC. The simple measurement and control software, EPMon ForVOS can process trend data of each parameter.

Model	VOS-452SD	VOS-602SD
Cat. No.	279690	278700
Heating method	Chamber heating	
Temperature control range and accuracy	40 to 210°C ±1.0°C (at 210°C)	40 to 200°C ±1.0°C (at 200°C)
Time to reach temperature	Approx. 80 min (40→210°C)	Approx. 110 min (40→200°C)
Ultimate vacuum	1hPa (0.75Torr)	
Temperature control / sensor	P.I.D control, SSR output, platinum resistance thermometer	
Timer function	Auto Start, Auto Stop	
Program function	2-step repetition, step operation (within 8 steps), 24-hour cycle	
External input / Output	USB communication terminal, Recorder output terminal / DC 0 to 8000mV, Alarm output terminal / Output: No-voltage a-contact output (rated AC250V 2A)	
Safety functions	Self-diagnostic functions (Temperature sensor error, Power return, Door alarm, Upper and lower temperature limit alarm, Heater short, Heater disconnection), Earth leakage/ Overcurrent breaker, Variable independent overheat protector (Model VOS-452SD: 50 to 270°C, Model VOS-602SD: 50 to 260°C)	
Heater	2.1kW	2.5kW
Vacuum gauge	Semiconductor pressure sensor (digital display) 0 to 1066hPa, minimum digit 1hPa	
Internal dimensions (mm), capacity	450W x 450D x 450H / 91L	600W x 600D x 600H / 216L
Shelf load capacity / Material	Uniform load capacity 15kg/shelf, Stainless steel plate	
Number of shelves included	3 pieces (mountable 6pcs)	4 pieces (mountable 6pcs)
Shelf Pitch / Number of brackets	71mm / 6 brackets (fixed)	95mm / 6 brackets (fixed)
Observation window	250W x 250H (mm)	430W x 430H (mm)
Door inner surface	Tempered glass, thickness 15mm	Tempered glass, thickness 19mm
Material of gas contact parts	Door gasket: Silicone, Chamber interior: Stainless steel, Glass, Piping: Stainless steel, PTFE with glass fiber	
Connection diameter	Suction nozzle: 22mm ((O.D.) hose mouth) Purge nozzle: Outer diameter 16 mm (internal thread Rc1/4)	
Ambient temperature range	5 to 35°C	
External dimensions (mm)	655(673)Wx597(605)Dx905H	860(878)Wx780(785)Dx1720 (1780)H (including stand)
Gross weight	Approx. 135 kg	Approx. 345 kg
Power input	10.75A, 2.15kVA	12.75A, 2.55kVA
Supply voltage/utility	200VAC single phase 50/60Hz 15A	