Sturdy
Wellell Group

Professional Compound Sterilizer
For Laboratory and Biological Research

Prime 30L/56L

The best laboratory applications solution without any missing

- F_0 Automatic Calculation
- Biohazard Protection System
- Fast Cooling Technology
- Traceability Sterilization Process
- Diversified Sterilization Program

Reliable Sterilization Partner

Designed for Laboratory and Research Institution

Prime Lab series aims to provide high-precision, high-protection
and reliable sterilizers for various applications in the laboratory and biological research.

An Accurate, Convenient, and Safety Sterilizer

Features

- Touch Panel HMI - Human-Machine Interface
- Digital Temperature & Pressure Control
- Independent PT 100 temperature sensors for precise sterilization
- Flexible personnel and sterilization loads management system
- Efficient air removal by the powerful vacuum system
- Complete filtration system for all-round protection of personnel, environment, and sterilization loads
- Fully customized program can complete all sterilization task
- F_0 value calculation

Validation & Qualification

- Validation and Qualification documentation
  IQ – Installation Qualification
  OQ - Operational Qualification
  PQ - Performance Qualification

Excellent Performance

Equipped with PT-100 high-precision temperature sensor and 3-stage fast cooling, 5-inch touch panel, 17 preset programs and integrated by a human-machine interface.

Diversified Applications

- Agar Preparation
- Liquid Sterilization
- Empty Glassware Sterilization
- Instrument & Solid Sterilization
- Waste Liquid / Solid / Mixed Sterilization
- Respirator Mask Sterilization
- Other Heat Resistant Materials

High Environmental Adaptability

Meet the high altitude of 3,000 meters, automatic pipeline filling and manual front filling without a pipeline, can overcome environmental factors and place it in any corner.

Accurate

Prime Lab Series has a new comprehensive and scalable traceability system.
By scanning the barcode you can accurately grasp the complete details of all sterilization cycles and save on the built-in memory, the data can be read and analyzed via USB using the FileCheck software or the optional SteriProcess IoT transfers the data via RJ-45 or Wi-Fi for further analysis, save, automatically archive, you can analyze and manage sterilization data more simply, efficiently and conveniently.

- Fully Customized Program with PT-100 High-Precision Temperature Sensor

  Built-in two PT 100 sensors to detect the real-time temperature of Chamber, Liquid loads, and accurately adjust the record to improve the overall sterilization performance.
  With the Fully Customized Program, it can experiment with the precise sterilization.

- Traceable for operator ID and Sterilization loads check in & check out

  Accurately record all relevant information through the bar code label of the sterilization process, more effective tracing of all cycles improve sterilization efficiency and management efficiency.

Reliable Data Recording System

The sterilization record is digitally barcoded, which completely records all the details of the sterilization data, increases the traceability, reduces the tedious recording work, and improves the work efficiency.

Step.1
Print the barcode label and apply to each loads

Step.2
Scan barcode login ID and loads barcode

Step.3
Place loads into the chamber

Step.4
Complete sterilization cycle

Step.5
Scan barcode to record detailed sterilization data

✓ Process completed

Convenient

The excellent design can be placed on a desktop with a general depth of 70 cm with a capacity of 56 liters, which is unrestricted and easy to operate. Every detail of Prime series has been carefully thought out to make it attractive and practical at the same time.

Full Color Touch Panel, Just Click and Start

Easy following design and shortcut menu for quick access, with a 5-inch full-color touch screen, just select the desired program and press "Start".
Prime L will automatically start the sterilization cycle from beginning to end without any other operations.

Free from Troublesome Agar Clogging

We understand how troublesome it is for users to remove cooled agar from their pipes.
Prime L series pipe heaters can heat pipes that may be clogged with agar, soften the agar so that Agar cannot condense in the pipe, solve the annoying problem, and you can focus more on your research.

EZ Light Process Indicator

The EZ Light sterilization progress light composed of LEDs will change color with the different stages of the sterilization cycle, providing you with valuable information at a glance.

Blue Light
The sterilizer is standby

Blue Light (blinking)
Cycle is in running

Green Light
Cycle is complete, loads sterilized

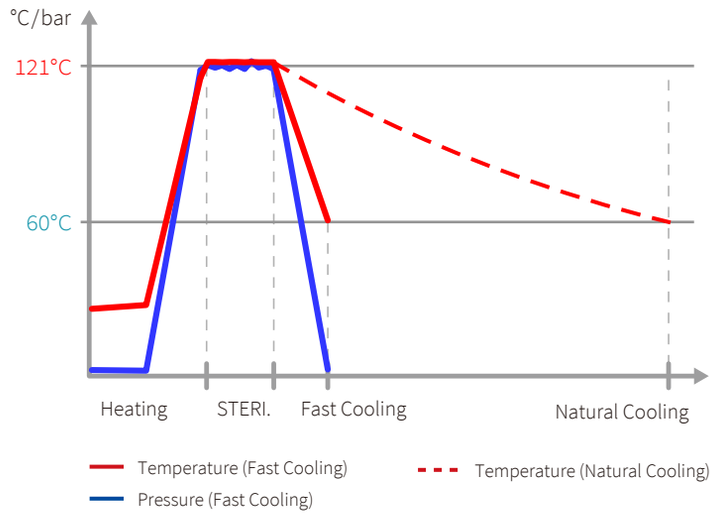
Red Light
Warning, cycle error

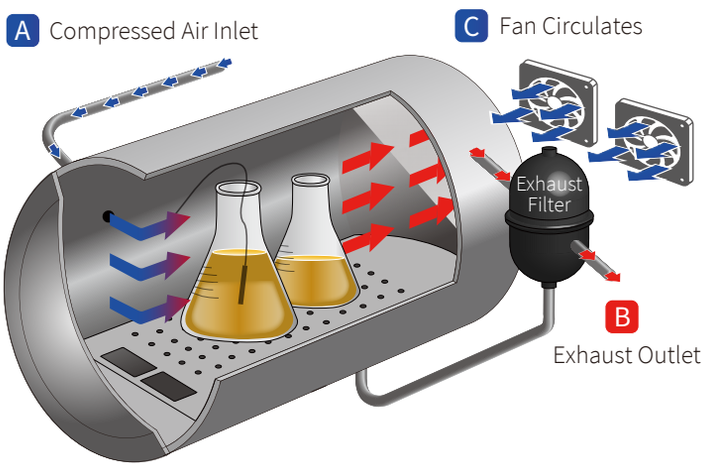
* EZ Light Process Indicator

Fast Cooling System

The time to complete a sterilization cycle usually has a long time waiting for cooling, especially with liquid loads.
The advanced Prime Lab series offers three cooling devices to rapidly reduce chamber temperature and liquid temperature, and prevent sudden drops in chamber pressure causing the liquid to boil.

Sturdy's Fast cooling technology reduces over 1 hour of waiting time and at safer temperatures.





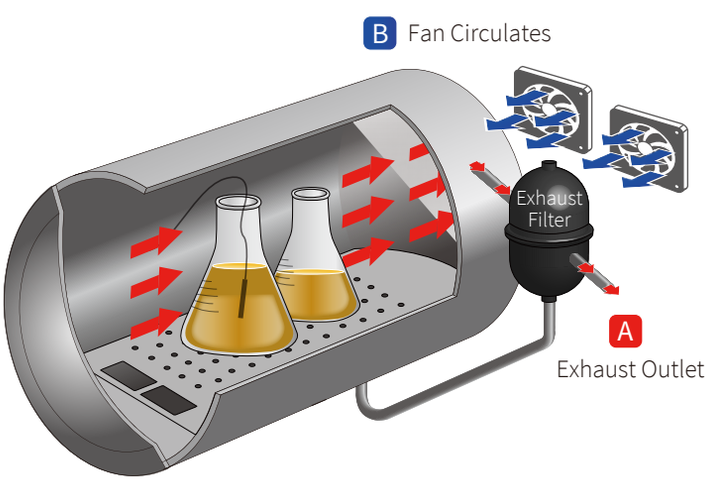
Advanced type Cooling (Fast Cooling)

Compressed Air Cooling

Compressed air enters the chamber through the air filter to prevent under pressure and prevent deformation, cracking or overflow of the load.

Exhaust Adjustment

Exhaust the steam in the chamber to accelerate the cooling by air flow.



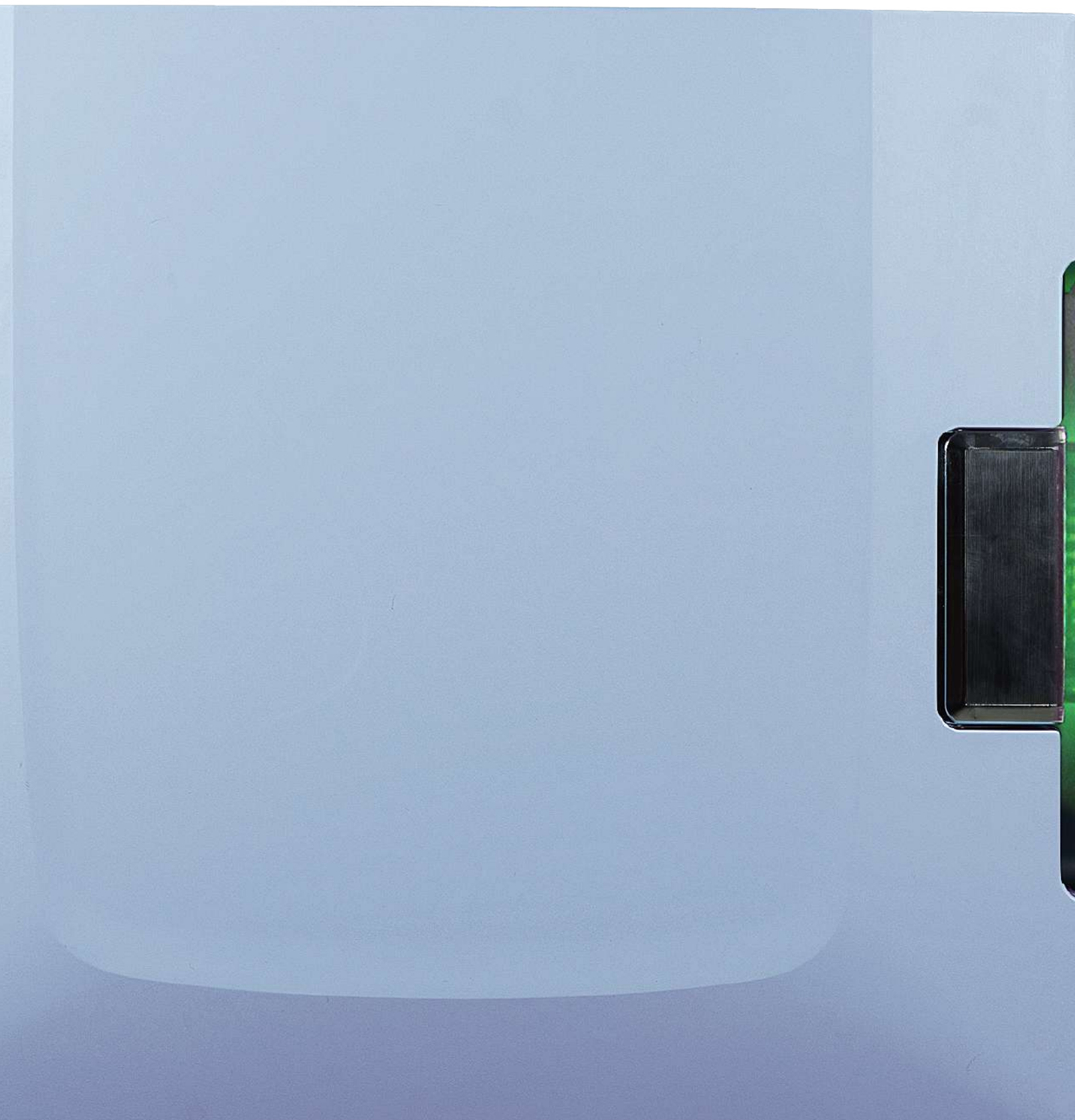
Standard type Cooling

Fan Cooling

The air is further circulated through the two fan motors to accelerate heat dissipation and rapid cooling.

Safety

Not only quality, we also guarantee
the safety of users and the environment.



Consistent safety and stable efficiency-this is the design concept of Prime
What you get is a sturdy, high-performance sterilizer that can provide maximum flexibility for any sterilization task while protecting your environment and sterilization loads.

Four Door Locking System

Reliable door lock system with multiple lock designs When the door is closed, it will automatically detect the position and lock it. The door cannot be opened until the sterilization cycle is completed and the temperature and pressure drop below the safe value.

PED Certified Pressure Vessel

Chamber is made of 316L stainless steel and is welded by an automatic arm. The quality is stable and it has obtained PED pressure vessel certification.

Power Response System

When the sterilizer power is interrupted during the cycle the pressure is automatically released and returned to standby to protect user safety.

Overpressure Protection

During the cycle, if the pressure is too high due to errors, the protector will stop the cycle to protect the safety of users and prolong the sterilizer life.

Overheat Protection

During the cycle, if the temperature is too high due to errors, the protector will stop the cycle to protect the safety of users and prolong the sterilizer life.

Biohazard Air Filter System

Using 0.3um HEPA air and exhaust filter can prevent harmful substances in the chamber from being released into the environment before sterilization, and can protect the sterilized loads from being polluted by the external environment when they are dry.

Air Filtration System

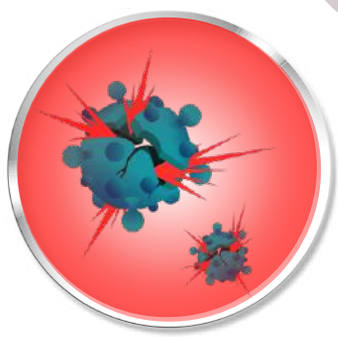
Prime greatly improves the air filtration system. In addition to the safety of sterilization loads, it also increases the protection of personnel and the environment to ensure that the air released from the autoclave during the pre-vacuum stage has been processed to make it free of viruses or other residual potential hazardous substances.

Pre Vacuum Phase

In air removal, the air in the chamber is filtered. This ensures that during the air removal phase any harmful substances, including viruses, will not be released into the environment.

Sterilization Phase

When the sterilization temperature is reached the exhaust filter will be filled with steam for sterilization to achieve a more ideal sterilization process.

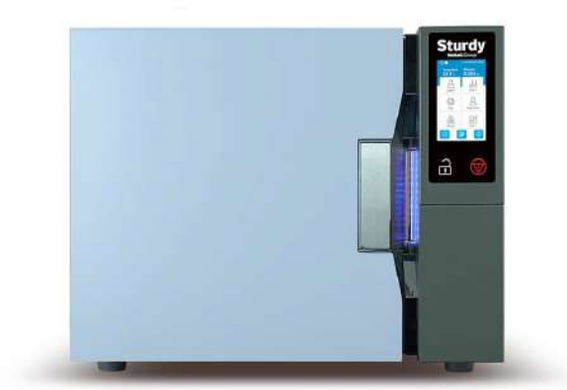


Post Vacuum (Dry) Phase

When drying, ambient air is introduced into the chamber and filtered prior to heating to ensure that the sterilizer load is protected from external environmental contamination.

Built-in Steam Generator

Prime 30L & Prime 56L equipped with a built-in steam generator can not only provide fast and efficient heating and complete drying, but also increase the available space of the chamber.



Prime 30L

Prime 56L

Chamber size is divided into 30 and 56 liters

Model	Prime 30L	Prime 56L
Chamber Capacity (Liter / Gallon)	30 Liters / 7.9 Gallons	56 Liters / 14.8 Gallons
Chamber Size Diameter x Depth (mm / inch)	Ø 300 x 452 (mm) Ø 11.8 x 17.8 (inch)	Ø 380 x 522 (mm) Ø 15 x 20.6 (inch)
Chamber Material	316L Stainless Steel	316L Stainless Steel
Overall Dimension (mm / inch)	584 (W) x 480 (H) x 670 (D) (mm) 23 (W) x 18.9 (H) x 26.4 (D) (inch)	720 (W) x 535 (H) x 710 (D) (mm) 28.3 (W) x 21.1 (H) x 28.0 (D) (inch)

Erlenmeyer Flasks Loading Capacity *

Model	Prime 30L	Prime 56L
250ml (cc)	5 pcs	15 pcs
500ml (cc)	3 pcs	8 pcs
1000ml (cc)	3 pcs	6 pcs
2000ml (cc)	0 pcs	2 pcs
5000ml (cc)	0 pcs	0 pcs

Schott-Duran Bottles Loading Capacity *

Model	Prime 30L	Prime 56L
250ml (cc)	10 pcs	18 pcs
500ml (cc)	5 pcs	15 pcs
1000ml (cc)	4 pcs	8 pcs
2000ml (cc)	0 pcs	3 pcs
5000ml (cc)	0 pcs	0 pcs

* Loading capacities may vary option-dependent.
Flasks and bottles of different sizes may change the loading capacity.

Specification

Prime 30L models

		Prime 30L_Economic	Prime 30L_Standard	Prime 30L_Advanced
Chamber Size (Ø x Depth)		Ø 300 x 452 (mm) / Ø 11.8 x 17.8 (inch)		
Chamber Capacity		30 Liters / 7.9 Gallons		
Pressure Vessel Material		316L Stainless Steel		
Sterilization Temperature		105-135°C, Adjustable		
Sterilization Temperature Sensor		PT-100 (Chamber and Floating Temperature Sensor)		
Operation Interface		5" LCD Full Color Touch Screen		
Altitude Usage		Under 3,000 m		
Overall Dimension		584 (W) x 480 (H) x 670 (D) (mm) / 23 (W) x 18.9 (H) x 26.4 (D) (inch)		
Net Weight		68 kg	73.5 kg	75 kg
Power Supply		230 VAC, 50/60 Hz	230 VAC, 50/60 Hz	
Current		12.6 A	13.3 A	
Power Consumption	Main-Heater	2,000 W	2,000 W	
	Bend-Heater	900 W	900 W	
	Pipe-Heater	N/A	43 W	
	Vacuum Pump	N/A	100 W	
Built-in Memory		2 GB	2 GB	
Printer		N/A	Thermal Printer	
USB Port		4	4	
RJ-45 Port		1	1	
Water Reservoir Capacity		4,200 ml	4,200 ml	
Water Supply System (For Tank)		Manual	Manual or Automatic	
Pre-Vacuum		N/A	YES	
Post-Vacuum (Dry)		N/A	YES	
Air Filter		≤ 0.3 µm HEPA Filter	≤ 0.3 µm HEPA Filter	
Exhaust Filter		N/A	N/A	HIGH FLOW TETPOR II Filter.
Exhaust Filter Temperature Sensor		N/A	N/A	YES
Cooling System		Exhaust Level 0 - 10 Level, adjustable		
		Fan Cooling x 1 pc	Fan Cooling x 3 pcs	Fan Cooling x 3 pcs
		N/A	N/A	Pressure Cooling *
Program		Liquid 1 / Liquid 2	Liquid 1 / Liquid 2	Liquid 1 / Liquid 2
		Solid 1 / Solid 2	Solid 1 / Solid 2	Solid 1 / Solid 2
		Agar	Agar	Agar
		Dissolution	Dissolution	Dissolution
		User 1 / User 2	User 1 / User 2	User 1 / User 2
		Dry-Only	Dry-Only	Dry-Only
		Waste Liquid / Solid / Mixed	Waste Liquid / Solid / Mixed	Waste Liquid / Solid / Mixed
		Latex	Latex	Latex
		Flash	Flash	Flash
		Cleaning	Cleaning	Cleaning
		N/A	Leakage Test	Leakage Test
		N/A	Bowie-Dick Test	Bowie-Dick Test
Reservation Start		YES		
Calculation of F0 value		YES		
ID and Loads Tracking Management		YES		
Optional Accessories		• Wire-Mesh Basket	• Waste Sterilization Box	• Tray Set
		• Barcode Scanner	• Barcode Printer	• SteriProcess IoT Server
		• Water Distiller	• RO Water Filter	• Wi-Fi Dongle
Standards and Directives		ISO 13485:2016 Quality Management System - Medical Devices PED 2014/68/EU Pressure Equipment Directive ASME BPVC Section VIII-1 Rules for Construction of Pressure Vessels EN/IEC 61010-1 Safety Requirements for measurement control and laboratory use EN/IEC 61010-2-040 Safety requirements for sterilizers used to treat medical materials EN/IEC 61326-1 EMC RoHS Restriction of Hazardous Substances Directive 2011/65/EU		

* An certified pressure regulator should be used for pressure cooling function (optional).

Specification

Prime 56L models

		Prime 56L_Economic	Prime 56L_Standard	Prime 56L_Advanced
Chamber Size (Ø x Depth)		Ø 380 x 522 (mm) / Ø 15 x 20.6 (inch)		
Chamber Capacity		56 Liters / 14.8 Gallon		
Pressure Vessel Material		316L Stainless Steel		
Sterilization Temperature		105-135°C, Adjustable		
Sterilization Temperature Sensor		PT-100 (Chamber and Floating Temperature Sensor)		
Operation Interface		5" LCD Full Color Touch Screen		
Altitude Usage		Under 3,000 m		
Overall Dimension		720 (W) x 535 (H) x 710 (D) (mm) / 28.3 (W) x 21.1 (H) x 28.0 (D) (inch)		
Net Weight		100 kg	105.5 kg	107 kg
Power Supply		230 VAC, 50/60 Hz	230 VAC, 50/60 Hz	
Current		12.6 A	13.3 A	
Power Consumption	Main-Heater	2,000 W	2,000 W	
	Bend-Heater	900 W	900 W	
	Pipe-Heater	N/A	43 W	
	Vacuum Pump	N/A	100 W	
Built-in Memory		2 GB	2 GB	
Printer		N/A	Thermal Printer	
USB Port		4	4	
RJ-45 Port		1	1	
Water Reservoir Capacity		16,000 ml	16,000 ml	
Water Supply System (For Tank)		Manual	Manual or Automatic	
Pre-Vacuum		N/A	YES	
Post-Vacuum (Dry)		N/A	YES	
Air Filter		≤ 0.3 µm HEPA Filter	≤ 0.3 µm HEPA Filter	
Exhaust Filter		N/A	N/A	HIGH FLOW TETPOR II Filter
Exhaust Filter Temperature Sensor		N/A	N/A	YES
Cooling System		Exhaust Level 0 - 10 Level, adjustable		
		Fan Cooling x 1 pc	Fan Cooling x 3 pcs	Fan Cooling x 3 pcs
		N/A	N/A	Pressure Cooling *
Program		Liquid 1 / Liquid 2	Liquid 1 / Liquid 2	Liquid 1 / Liquid 2
		Solid 1 / Solid 2	Solid 1 / Solid 2	Solid 1 / Solid 2
		Agar	Agar	Agar
		Dissolution	Dissolution	Dissolution
		User 1 / User 2	User 1 / User 2	User 1 / User 2
		Dry-Only	Dry-Only	Dry-Only
		Waste Liquid / Solid / Mixed	Waste Liquid / Solid / Mixed	Waste Liquid / Solid / Mixed
		Latex	Latex	Latex
		Flash	Flash	Flash
		Cleaning	Cleaning	Cleaning
		N/A	Leakage Test	Leakage Test
		N/A	Bowie-Dick Test	Bowie-Dick Test
Reservation Start		YES		
Calculation of F0 value		YES		
ID and Loads Tracking Management		YES		
Optional Accessories		• Wire-Mesh Basket	• Waste Sterilization Box	• Tray Set
		• Barcode Scanner	• Barcode Printer	• SteriProcess IoT Server
		• Water Distiller	• RO Water Filter	• Wi-Fi Dongle
Standards and Directives		ISO 13485:2016 Quality Management System - Medical Devices PED 2014/68/EU Pressure Equipment Directive ASME BPVC Section VIII-1 Rules for Construction of Pressure Vessels EN/IEC 61010-1 Safety Requirements for measurement control and laboratory use EN/IEC 61010-2-040 Safety requirements for sterilizers used to treat medical materials EN/IEC 61326-1 EMC RoHS Restriction of Hazardous Substances Directive 2011/65/EU		

* An certified pressure regulator should be used for pressure cooling function (optional).

Standard Accessories

Starter kit included

Standard Bottle Plate

A 316L stainless steel support surface that is suitable for loads with erlenmeyer flasks schott-duran bottles or other sterilization loads.
Dimensions (W x D) :
30L : 140 x 404 (mm)
56L : 265 x 465 (mm)

- User Manual x 1 pc.,
- FileCheck Software x 1 pc.,
- Quick Drain Tube x 1 pc.,
- Cham-mate x 2 pcs.,
- Printer Paper x 5 pcs.(Only for Standard & Advanced type).

Consumables :

HEPA Air Filter

Filtering effect of air particles under 0.3µm is over 99.99%.

Exhaust Filter

HIGH FLOW TETPOR II Filter.
(Only for Advanced type)

Cham-mate Cleaner

Autoclave chamber & piping cleaner.

Printer Paper

Used to print sterilization data on thermal printer.
(Only for Standard & Advanced type)

Drain Filter

Filter the impurities in the waste water to avoid clogging the pipe.

Optional Accessories

Wire - Mesh Basket

Sterilization basket, made of 304 stainless steel.
Dimensions (W x H x D):
30L : 215 x 190 x 375 mm
56L : 295 x 215 x 380 mm

Waste Sterilization Box

Sterilization bucket, made of 304 stainless steel. Used to contain waste loads.
Dimensions (W x H x D):
30L : 210 x 200 x 360 mm
56L : 300 x 230 x 405 mm

Tray Set

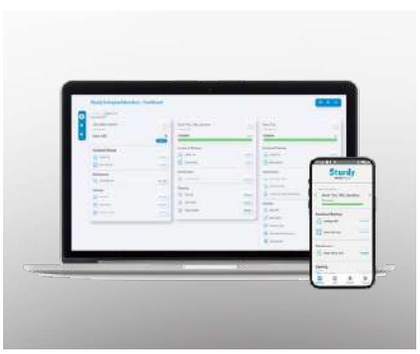
Square tray holder with a capacity of four perforated sieve trays, made of 304 stainless steel.
Tray dimensions (W x H x D):
30L : 203 x 32 x 368 mm
56L : 280 x 38 x 409 mm

Barcode Scanner

Barcode for scanning sterilization loads to record sterilization data.

Barcode Printer

Sterilization labels for continuous production, safely tag loads in a few simple steps.



SteriProcess IoT Server

A web, mobile devices and application that allows you to view the status of autoclaves wherever you are and save a backup of the cycle history database on server for management analysis.

Water Distiller

Turns water into steam to remove fluoride lead, viruses and other contaminants protecting your sterilizer and instruments at a fraction of cost.

RO Water Filter

Filter out dirt odor, chlorine and salt extending life usage of the sterilizer and quality.

Wi-Fi Dongle

Support hot swapping, so that the Prime Series can receive wireless network signal.

Sturdy
Wellell Group

Professional design and manufacturer of autoclaves /sterilizers with

30 years' experience

Product distribution to clinics, hospitals and laboratories in more than

80+ countries

Provide sales and after-sales service worldwide with more than

400+ distributors

Durable, Authentic & Efficient Sterilization

Establishment in 1992, STURDY as one of the leaders of autoclave in Taiwan. It is committed to providing reliable and durable autoclave worldwide for nearly 30years.In fact, STURDY has its presence in more than 80 countries and has 400 distributors around the world.

Its STURDY's business philosophy of integrity, innovation, safety, quality and practicality demonstrates through its products.

Relying on decades of Sterilization expertise, comprehensive education and training, good after-sales service are also available.

From design, development to manufacturing, our autoclaves are 100% MIT (Made in Taiwan) and all products pass stringent safety and quality standards and directives such as ISO 13485 , CE ,Taiwan GMP, PED, FDA 510K, ASME.

As such, STURDY prides itself of being your **"Reliable Sterilization Partner - STURDY"**.

Sturdy Industrial Co., Ltd.

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