GMP
CE 0120

Low Temperature Plasma Sterilizer

LowTem
Infection Prevention

LowTem is

LowTem is a global enterprise specialized in the healthcare products.
We focus on creating the safest environments for the customers.

Vision

LowTem sells Customer Satisfaction.

- We are not only selling the items, but your satisfaction.
- We are willing to listen to your advices to improve our technology.

LowTem prepares Present dreaming Future, as today is the beginning of our bright future.

- LowTem is a professional for Low Temperature Plasma Sterilizers, but considers more about improving our quality in order to protect our customers
- LowTem prepares an innovative future technology to ensure the quality of sterilization and infection prevention for our customers.

Low Temperature Plasma Sterilizer is

Safe

Low Temperature Plasma Sterilizer is user-friendly, as the main sterilizing agent is very safe, remaining nontoxic residue (Water and Oxygen).

Quick Cycle Time

1. Fast running cycle increases turnover rate the delicate and state-of-the art medical equipments in the hospital.
2. This rapid turnover rate lightens the hospitals' financial burden, as they do not need to equip a number of redundant medical devices.

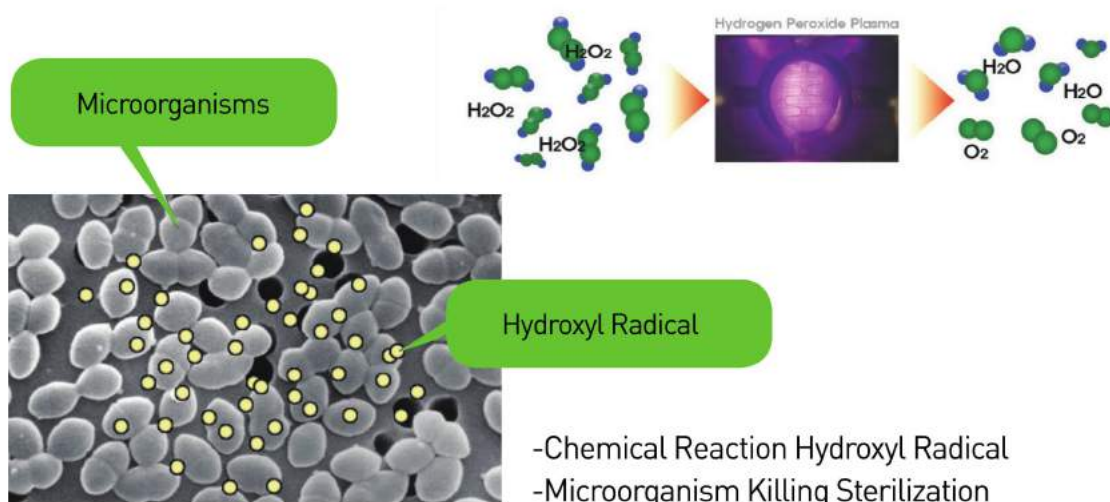### Green Method and Products

The by-products after sterilization, water and oxygen, contribute Green Environment as well as guarantee user-safety, substituting for other sterilizations which use harmful materials

Low Temperature Sterilization

The temperature keeps lower than 60°C and cycle time is under 1 hour, which prevents heat and moisture damages to sophisticated medical instruments, and prolongs the life expectancies of them.
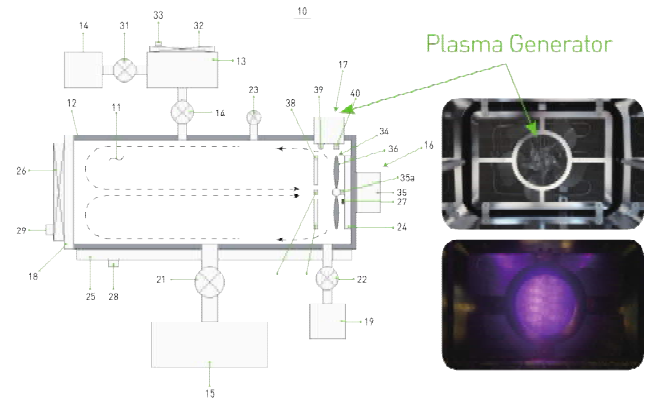
Basic Principle of Low Temperature Plasma Sterilizer

Microorganisms

Hydroxyl Radical

Hydrogen Peroxide Plasma

H_2O_2 → H_2O, H_2O, O_2, O_2

-Chemical Reaction Hydroxyl Radical
-Microorganism Killing Sterilization

Main Features of LOWTEM Series

1) Rapid Warmup & Dry System

The world's first patented "Rapid Warmup and Dry System" allows to overcome the humidity-related problem, removing residual moisture and chamber's cold point.
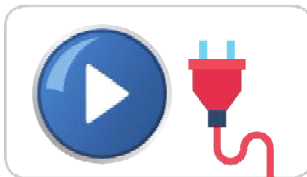

Plasma Generator

2) Convenient and Safe Sterilizing Agent

Multi-cycle "Tank type" sterilant is safe for users to store, to deliver, and to use. The automatic RFID system for using sterilant tank is convenient and reliable for users.

3) 7" full touch LCD, Easy Monitoring the Cycle Information

User can monitor the actual temperature and pressure from the graph on the 7"full touch LCD monitor friendly touching icons.

4) Plug and Play

LOWTEM Series' warming up time is very rapid (Maximum 15 min) after main power is on, so that standby power consumption is zero during off-duty or overnight.

LOWTEM Accessories
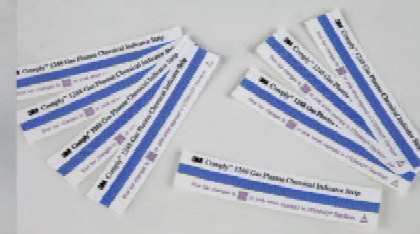
◀ Sterilizing Agent

Chemical Indicator Tape ▶

Pouch

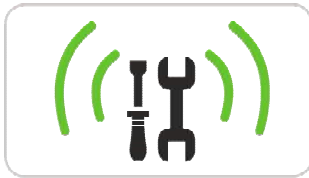Biological Indicator ▶

Printer Roll Paper

Chemical Indicator Strip

5) USB History Memory and Monitoring System

LOWTEM Series' sterilization history can be downloaded to your USB memory stick, and maintained at your convenience. Furthermore, it can be remote-controlled by its own out-of-state network system.
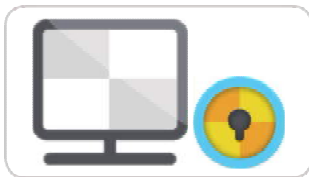
6) Automatic PM Alarm System

LOWTEM Series provide alarms to prevent from irregular maintenance.
Automatic PM Alarm System is very useful for users and engineers to be noticed.

7) Built in Thermal Printer, Printout with Actual Cycle Information

Built-in thermal printer uses 60mm (Ø) Roll paper. Users do not need to replace it often. The printout from this printer provides temperature, pressure with the cycle graph on the paper.

8) Login Function

LOWTEM Series provide User ID and PW, so that hospital can manage users who access the sterilizer.
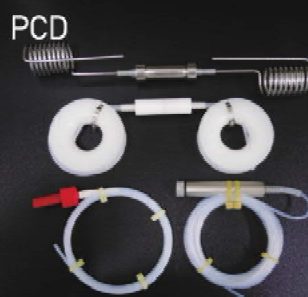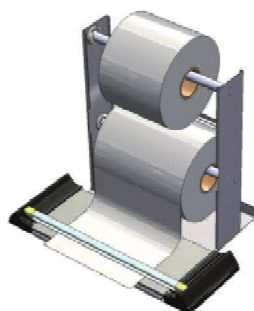
LOWTEM Accessories

◀ Incubator

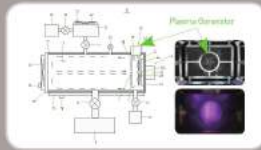Auto Sealing Machine

Containers

Cutting ▶ Device

PCD

Non Woven Sheet

LOWTEM Crystal 40R

1) Rapid Warmup & Dry System

2) Convenient and Safe Sterilizing Agent

3) 7" full touch LCD, Easy Monitoring the Cycle Information

4) Plug and Play

5) All-in-one Basket Tray

6) Automatic PM Alarm System

Sterilizing Agent		Hydrogen Peroxide 40 Cycles/Bottle
Total Cycle Time	Quick Standard Special	25+5min 35+5min 45+5min
Cycle Temperature		50± 5°C
SAL(Sterility Assurance Level)		10^{-6}
By-products		Oxygen and vapor water only
Lumenclaims		Rigid lumen & Flexible lumen, Endoscopes
Chamber	Type Material	Rectangular Stainless Steel (SUS)
Dimensions	Overall Chamber	530mm(W) X 740(H) X 790(D) 300mm(W) X 220(H) X 640(D)
Volume		Total : 40 Liters
Weight		140Kg
Control		Microprocessor & Windows CE embedded
Cycle Information		Screen, Printer, USB, 100/10Mbps Ethernet(Option)
PM Cycle		Automatic Alarm & Setup
Electrical		110V / 220V, 50 / 60Hz, 1Phase, 1600W
Installation Requirements		Front : 100cm Rear, Left side, Right side : 10cm Placement : Built-in wheels provide mobility
Room Conditions		5~40°C, 0~95%RH(Non-Condensing)
Printer		Built-in Thermal Printer(60Ø Roll Paper) Cycle Parameters(Temp, Pressure, Time, Daily&Total Cycle, etc) Alarm & Error Display
Others		Emergency Stop(Front), Operator ID Login, Self-Diagnosis, Multi-Language, RFID Coding System
Cart(Option)		530mm(W) X 720(H) X 800(L) / 50kg

LOWTEM Crystal 50

7) Built in Thermal Printer, Printout withActual Cycle Information

8) Login Function

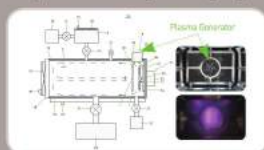**9) Table-top Model**

10) Auto Interlock & Open System

11) Useful Cart

12) USB History Memory- and Monitoring System

Sterilizing Agent		Hydrogen Peroxide 40 Cycles/Bottle
Total Cycle Time	Quick Standard Special	25+5min 35+5min 45+5min
Cycle Temperature		50±5°C
SAL(Sterility Assurance Level)		10^{-6}
By-products		Oxygen and vapor water only
Lumenclaims		Rigid lumen & Flexible lumen, Endoscopes
Chamber	Type Material	Rectangular Stainless Steel (SUS)
Dimensions	Overall Chamber	530mm(W) X 780(H) X 855(D) 320mm(W) X 230(H) X 708(D)
Volume		Total : 50 Liters
Weight		150Kg
Control		Microprocessor & Windows CE embedded
Cycle Information		Screen, Printer, USB, 100/10Mbps Ethernet(Option)
PM Cycle		Automatic Alarm & Setup
Electrical		110V / 220V, 50 / 60Hz, 1Phase, 1800W
Installation Requirements		Front : 100cm Rear, Left side, Right side : 10cm Placement : Built-in wheels provide mobility
Room Conditions		5~40°C, 0~95%RH(Non-Condensing)
Printer		Built-in Thermal Printer(60Ø Roll Paper) Cycle Parameters(Temp, Pressure, Time, Daily&Total Cycle, etc) Alarm & Error Display
Others		Emergency Stop(Front), Operator ID Login, Self-Diagnosis, Multi-Language, RFID Coding System
Cart(Option)		530mm(W) X 720(H) X 800(L) / 50kg

LOWTEM Crystal 100

1) Rapid Warmup & Dry System

2) Convenient and Safe Sterilizing Agent

3) 7" full touch LCD, Easy Monitoring the Cycle Information

4) Plug and Play

5) All-in-one Basket Tray

Sterilizing Agent		Hydrogen Peroxide 25 Cycles/Bottle
Total Cycle Time	Quick Standard Special	25+5min 35+5min 45+5min
Cycle Temperature		50±5°C
SAL(Sterility Assurance Level)		10^{-6}
By-products		Oxygen and vapor water only
Lumenclaims		Rigid lumen & Flexible lumen, Endoscopes
Chamber	Type Material	Circle Stainless Steel (SUS)
Dimensions	Overall Chamber	680mm(W) X 1600(H) X 900(D) Ø 420mm X 740(D)
Volume		Total : 100 Liters
Weight		250Kg
Control		Microprocessor & Windows CE embedded
Cycle Information		Screen, Printer, USB, 100/10Mbps Ethernet(Option)
PM Cycle		Automatic Alarm & Setup
Electrical		110V / 220V, 50 / 60Hz, 1Phase, 3000W
Installation Requirements		Front : 100cm Rear, Left side, Right side : 10cm Placement : Built-in wheels provide mobility
Room Conditions		5~40°C, 0~95%RH(Non-Condensing)
Printer		Built-in Thermal Printer(60Ø Roll Paper) Cycle Parameters(Temp, Pressure, Time, Daily&Total Cycle, etc) Alarm & Error Display
Others		Emergency Stop(Front), Operator ID Login, Self-Diagnosis, Multi-Language, RFID Coding System

Sterilizing Agent		Hydrogen Peroxide 20 Cycles/Bottle
Total Cycle Time	Quick Standard Special	30+5min 40+5min 50+5min
Cycle Temperature		50±5°C
SAL(Sterility Assurance Level)		10^{-6}
By-products		Oxygen and vapor water only
Lumenclaims		Rigid lumen & Flexible lumen, Endoscopes
Chamber	Type Material	Rectangular Stainless Steel (SUS)
Dimensions	Overall Chamber	120M:680mm(W) X 1600(H) X 930(D) / 120D:680mm(W) X 1600(H) X 780(D) 120M:420mm(W) X 400(H) X 778(D) / 120D:420mm(W) X 450(H) X 720(D)
Volume		Total : 130 Liters
Weight		300Kg
Control		Microprocessor & Windows CE embedded
Cycle Information		Screen, Printer, USB, 100/10Mbps Ethernet(Option)
PM Cycle		Automatic Alarm & Setup
Electrical		110V / 220V, 50 / 60Hz, 1Phase, 3000W
Installation Requirements		Double Door : Front, Rear (100cm), Left, Right (10 cm) Single Door : Front (100cm), Rea , Left, Right (10 cm) Placement : Built-in wheels provide mobility
Room Conditions		5~40°C, 0~95%RH(Non-Condensing)
Printer		Built-in Thermal Printer(60Ø Roll Paper) Cycle Parameters(Temp, Pressure, Time, Daily&Total Cycle, etc) Alarm & Error Display
Others		Emergency Stop(Front), Operator ID Login, Self-Diagnosis, Multi-Language, RFID Coding System

6) Automatic PM Alarm System

7) Built in Thermal Printer, Printout withActual Cycle Information

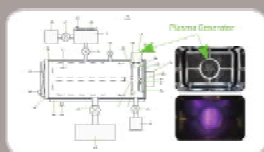**8) Login Function**

9) Auto Interlock & Open System

10) USB History Memory and Monitoring System

LOWTEM Smart 30

1) Rapid Warmup & Dry System

2) Convenient and Safe Sterilizing Agent

3) 7" full touch LCD, Easy Monitoring the Cycle Information

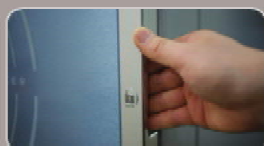## 4) Plug and Play

10) Table-top Model

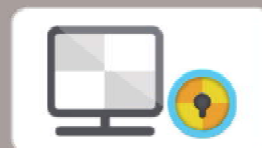## 6) Auto Interlock & Open System

7) Useful Cart

Sterilizing Agent		Hydrogen Peroxide 40 Cycles/Bottle
Total Cycle Time	Quick Standard Special	20+5min 30+5min 40+5min
Cycle Temperature		50±5°C
SAL(Sterility Assurance Level)		10^{-6}
By-products		Oxygen and vapor water only
Lumenclaims		Rigid lumen & Flexible lumen, Endoscopes
Chamber	Type Material	Rectangular Stainless Steel(SUS)
Dimensions	Overall Chamber	530mm(W) X 580(H) X 742(D) 260mm(W) X 220(H) X 590(D)
Volume		Total : 33 Liters
Weight		120Kg
Control		Microprocessor & Windows CE embedded
Cycle Information		Screen, Printer, USB, 100/10Mbps Ethernet(Option)
PM Cycle		Automatic Alarm & Setup
Electrical		110V / 220V, 50 / 60Hz, 1Phase, 1500W
Installation Requirements		Front : 100cm Rear, Left side, Right side : 10cm Placement : Built-in wheels provide mobility
Room Conditions		5~40°C, 0~95%RH(Non-Condensing)
Printer		Built-in Thermal Printer(60Ø Roll Paper) Cycle Parameters(Temp, Pressure, Time, Daily&Total Cycle, etc) Alarm & Error Display
Others		Operator ID Login, Self-Diagnosis, Multi-Language, RFID Coding System
Cart(Option)		530mm(W)x760(H)x660(L)/30kg

Sterilizing Agent		Hydrogen Peroxide 15 Cycles/Bottle
Total Cycle Time	Quick Standard Special	40+5min 50+5min 60+5min
Cycle Temperature		50±5°C
SAL(Sterility Assurance Level)		10^{-6}
By-products		Oxygen and vapor water only
Lumenclaims		Rigid lumen & Flexible lumen, Endoscopes
Chamber	Type Material	Rectangular Stainless Steel(SUS)
Dimensions	Overall Chamber	700mm(W) x 1640(H) x 980(D) 450mm(W) x 450(H) x 760(D)
Volume		Total : 150 Liter
Weight		350Kg
Control		Microprocessor & Windows CE embedded
Cycle Information		Screen, Printer, USB, 100/10Mbps Ethernet(Option)
PM Cycle		Automatic Alarm & Setup
Electrical		110V / 220V, 50 / 60Hz, 1Phase, 3000W
Installation Requirements		Double Door : Front, Rear (100cm), Left, Right (10 cm) Single Door : Front (100cm), Rear, Left, Right (10 cm) Placement : Built-in wheels provide mobility
Room Conditions		5~40°C, 0~95%RH(Non-Condensing)
Printer		Built-in Thermal Printer(60Ø Roll Paper) Cycle Parameters(Temp, Pressure, Time, Daily&Total Cycle, etc) Alarm & Error Display
Others		Emergency Stop(Front), Operator ID Login, Self-Diagnosis, Multi-Language, RFID Coding System

8) Built in Thermal Printer, Printout with Actual Cycle Information

9) Login Function
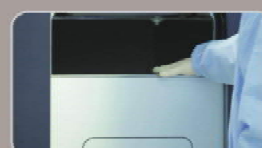

10) USB History Memory and Monitoring System

11) Automatic PM Alarm System

12) Open/Close Foot Switch

13) Sliding Door

14) Double Door System

LowTem
Infection Prevention