### **SOLUCIONES COVID-19**

### **PRODUCTOS PROTECTORES**

**SOLUCION INTEGRAL** 

LA INNOVACION MEJORA NUESTRAS VIDAS









### **SERVICIOS KUARTZ SA**

IMPORTA, DISTRIBUYE Y COMERCIALIZA TODA LA GAMA DE PRODUCTOS PARA PREVENIR Y COMBATIR AL VIRUS COVID-19



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PART 1: PLASMA AIR STERILIZERS

PART 2: 3PLY & KN95 MASKS

**PART 3: NON CONTACT THERMOMETERS** 

**PART 4: PROTECTIVE SUITS** 

**PART 5: VENTILATORS** 

PART 6: COVID-19 RAPID TESTS

PART 7: FACE SHIELDS, GLVOES, GOGGLES

**PART 8: PEROXIDE FOGGER** 

PART 9: HAND SANITIZERS



# Plasma Air Stellizer

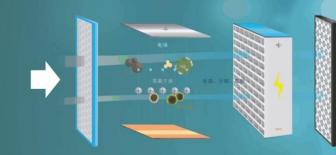
Breathe fresh air freely 20 Years

H1N1 Virus 99.95%

Natural Microorganism

Staphylococcus albus

Plasma Module Made to kill



Filtrate large particles in air, such as hair, suspended matter, etc.

Particles CADR —

 $>750m^3/h$ 

HCHO CADR

 $>400 \text{m}^3/\text{h}$ 

Plasma Module oxygen ions, high energy radicals that very easily to oxidize microorganisms, mold, spores, protein

High Polymer Filter

Mobile ▶ KJF-Y100



01 **PART** 

Wall Mounting KJF-B100 →

Central AC KJF-Q100 ▼



### **Plasma Air Sterilizer**

### **Cross Infection in Hospitals**

Hospital air contamination increases morbidity and mortality of patients, and in the meantime, puts medical persons at higher risk, increases medical costs, wastes social resources; on the other hand, costs of patients are increased as well.

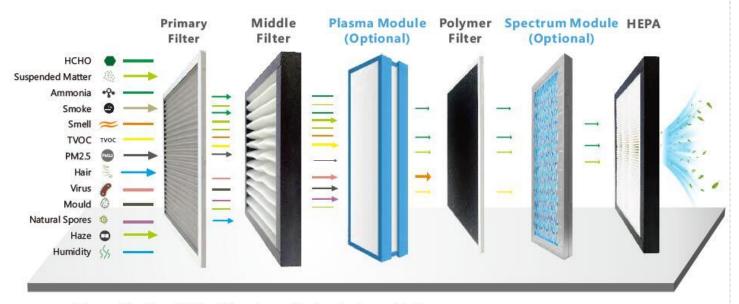
### **Air Purification and Disinfection in Hospitals**

Air purification and disinfection system is the most important among all air purification total solutions. It requires professional and high efficient purification, and in the meantime disinfection of air. Furthermore, it should provide customized solution according to actual conditions and requirements.

### **Application Range**

OT, Infectious Ward, ICU, NICU, Therapy Ward, Convalescent Ward, Inpatient Rooms, CSSD, Labs, Pathology Department, etc.





Note: confifuration might be different according to actual room situations.

### **PURIFICATION & DISINFECTION MODULES**

Primary Filter

Collect large particles in air such as hair, suspended matters, dusts, etc.

### Middle Filter

Filter are made of 100% synthetic fibre to filtrate small dust and other suspending matters.

### Plasma Module

Generate huge amount of active oxygen ions, high energy radicals that very easily to oxidize microorganisms, mold, spores, protein and nucleic acid of virus and kill all kind of microorganisms.

Spectrum Module

Generate UV of 240 - 280nm that kills airborne virus efficently.

### Polymer Filter

Remove and absorb smell, ammonia, TVOC, HCHO, etc.

### • HEPA

Removes 99% of 0.1µm and 0.3µm particles.

### **Plasma Air Sterilizer**

Item Code: KJF-B100

• Ambient: Temp.: -10° C-40° C,RH: ≤90%

Air Pressure: 86kPa-106kPaInstallation: Wall Mounted

• Room Size: ≤100m³

• Noise dB(A): ≤53

• Control: Remote, Mobile APP, Display Terminal

Dimension: 960x340x160mm

• Power Input: ≤55W

Connection: WiFi, Bluetooth

Net Weight: Appox. 14Kg



### Product Overview

### **Plasma Air Sterilizer**

Item Code: KJF-Y100

• Ambient: Temp.: -10° C-40° C, RH: ≤90%

Air Pressure: 86kPa-106kPa

• Installation: Mobile Room

• Size: ≤100m³

• Noise dB(A): ≤50

• Control: Remote, Mobile APP

• Display Terminal

• Dimension: 340x340x960mm

• Power Input: ≤50W

• Connection: WiFi, Bluetooth

• Gross Weight: Appox. 14Kg





02 PART

3PLY & KN95 MASKS

# Product Overview

# **Disposable Masks**



Item code: FM-1

- According to GBT 32610
- 3 ply
- Initial environment 400 CFU
- BFE≥95%
- Package: 50pcs/box, 40boxes/carton, 53x39x35cm, 8KG
- Non Sterile
- Lead time: 300,000pcs/day
- Certificate: None





### **Disposable Medical Masks**

Item code: MFM-1

According YY/0969-2013 (Equal to EN14683 II)

• 3 ply

Initial environment 100C FU

• BFE≥95%

 Package: 50pcs/box 40boxes/carton, 540\*410\*370, 8.5KG

Non Sterile

Lead time: 400,000pcs/day

• Certificate: CE





## Product Overview

### **Disposable Medical Surgical Masks**

Item code: SFM-1

- According YY/0469 (Equal to EN14683 IIR)
- 3 ply
- Initial environment 100C FU
- BFE≥95%
- PFE ≥30%
- Splash resistant ≤ 5.0 mm H2O/cm2
- Package: 50pcs/box, 40boxes/carton, 540\*410\*370, 8.5KG
- Sterile or Non Sterile
- Lead time: 100,000pcs/day
- Certificate: CE





### **Anti Particulate Respirator**

Item code: KN95-2

- According GB 2626 (Equal to EN149 FFP2)
- 4 ply
- Initial environment 100C FU
- BFE≥95%
- Package: 1pcs/pouch, 20pouches/box, 36boxes/carton, 500\*400\*435,7.1KG
- Non Sterile
- Lead time: 400,000pcs/day
- Certificate: CE





## Product Overview

### **Anti Particulate Respirator**

Item code: KN95-6

- According GB 2626 (Equal to EN149 FFP2)
- 4 ply
- Initial environment 100C FU
- BFE≥95%
- Package: 2pcs/pouch, 25pouches/box
- 20boxes/carton, 660\*275\*500,8.3KG
- Non Sterile
- Lead time: 400,000pcs/day
- Certificate: CE





03 PART

### NON CONTACT THERMOMETERS

# Product Information

Item code: FT-100B

- According to EN ISO 13485: 2016
- Measurement site: Forehead (non-contact, 1-3cm)
- Measurement range:
- Body temperature mode: 28.0~42.9° C (82.4° F~109.2° F)
- Environment temperature mode:
- 28.0~50.0° C (82.4° F~109.2° F)
- Package: 60pcs/Carton
- Lead time:
- Certificate: ISO: EX 60133014000

EC: DD 601330130001













# Package Box Overview



# Product Information

### **Infrared forehead thermometer**

Item code: JA-11S

- Measurement site: Forehead and ear canal
- Body temperature mode: 28.0~42.9° C (82.4° F~109.2° F)
- Environment temperature mode:
- 28.0~50.0° C(82.4° F~109.2° F)
- Package: 60pcs/Carton 32\*27\*37cm, 7.8kg
- Lead time: 15,000pcs/day, 30,000pcs/day from Mar. 30th
- Certificate: CE: BSTXD190312497401EC-R1

# Product Overview



### Functions & Contents



### Certificate

BST A RELIABLE TESTING FOR TRUST

# **Certificate of Compliance**

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Certificate No : BSTXD190312497401EC-R1

Applicant : QINGDAO YASEE MEDICAL DEVICE CO.,LTD

4 Layer, No.1 Dongfeng Road, Luwang Town, Huangdao Distict.

Qingdao City

Manufacturer : QINGDAO YASEE MEDICAL DEVICE CO.,LTD

4 Layer, No.1 Dongleng Road, Luwang Town, Huangdao Distict,

Qingdao City

Product Name : INFRARED ELECTRONIC THERMOMETER

Main Test Model : JA-11A

Additional Model : JA-11B, JA-11C, JA-11D, JA-11E, JA-11F, JA-11G, JA-11H,

JA-11S, JA-11R

Test Standard : EN 55032:2015

EN 61000-3-2:2014 EN 61000-3-3:2013 EN 55035:2017

As shown in the

Test Report No. : BSTXD190312497401ER-R1

The EUT described above has been tested by us with the listed standards and found in compliance with the council EMC directive 2014/30/EU. It is possible to use CE marking to demonstrate the compliance with this EMC Directive.

The certificate applies to the tested sample above mentioned only and shall not imply an assessment of the whole production.



CE

Christina Deng Manager Mar. 27, 2019

BST Technology (Shenzhen) Co.,Ltd.

Add: No.7, New Era Industrial Zone, Guantiers, Bacran District, Shenzhers, Guangdong, Chinal Certificate Search: <a href="http://www.bist-lab.com">http://www.bist-lab.com</a>. Tel: 400-882-9628, 8009990305, E-mail: ohristina@bist-lab.com

September of the septem

04 PART

### **PROTECTIVE SUITS**

# Product Overview

### **Disposable Protective Coveralls**

Item code: PC-W

Certificate: FDA ISO13485

EO Sterile

- According to: single-use protective clothing for medical use (GB19082-2009)
- Recommended Industry: Typical applications may include: Medical outpatient department, sick room, inspection chamber, lab room, ICU, CDC and other clinical protective place, Effective fight against virus.
- Feature: Disposable (special safety). Double Protection
   (Taped Seams + Velcro Design make it easier to operate).
   Triple Barrier (help provide barrier protection against liquid splashes, hazardous dusts, and certain biological contaminants). Four kinds of comfortable (light and permeable, overhang design+ slim fits, Anti-static, non-irritant)
- Material: PP non-woven fabric (30gsm) + Breathable film (30gsm) + glue (3gsm)

Lead time: TBD

• Package: 50 pcs/ carton



	_	COVE	PALIS ST	E DETAILS	
	L	COVI	IVALLS SIZ	LULIALS	
					unit:cr
Model	Lenght	Chest	Sleeve length	Sleeve opening	Ankle opening
160	165	120	84	18	24
165	169	125	86	18	24
170	173	130	90	18	24
175	178	135	93	18	24
180	181	140	96	18	24
185	188	145	99	18	24
Error	±2	±2	±2	±2	±2

### Product Overview

### **Disposable Isolation Coveralls**

Item code: IC-W

Certificate: FDA ISO13485

EO Sterile

According to: ISO 13485: 2016

- Recommended Industry: Typical applications may include:
   Apartment gate, street, office, community, city traffic crossroads, company, medical out patient, in patient, inspection chamber, lab., etc.
- Feature: Disposable (special safety). Double Protection
   (Taped Seams + Velcro Design make it easier to operate).
   Triple Barrier (help provide barrier protection against liquid splashes, hazardous dusts, and certain biological contaminants). Four kinds of comfortable (light and permeable, overhang design slim fits, anti-static, non-irritant)
- Material: PP non-woven fabric (37gsm) + PE film (28gsm)
- Lead time: TBD
- Package 50 pcs/carton

## Quality Guarantee Trustworthy COVERALLS SIZE DETAILS

					unit:cm
Model	Lenght	Chest	Sleeve length	Sleeve opening	Ankle opening
160	165	120	84	18	24
165	169	125	86	18	24
170	173	130	90	18	24
175	178	135	93	18	24
180	181	140	96	18	24
185	188	145	99	18	24
Error	±2	±2	±2	±2	±2



Inspection Report Safety Protection



# Product Overview

### **Disposable Protective Coveralls**

*Item code: PC-W2* 

Certificate: CE FDA ISO13485

• EO Sterile

According to: ISO 13485: 2016

- Recommended Industry: Typical applications may include: Medical outpatient department, sick room, inspection chamber, lab room, ICU, CDC and other clinical protective place, Effective fight against virus.
- Feature: Disposable (special safety). Double Protection
   (Taped Seams + Velcro Design make it easier to operate).
   Triple Barrier (help provide barrier protection against liquid splashes, hazardous dusts, and certain biological contaminants). Four kinds of comfortable (light and permeable, overhang design+ slim fits, Anti-static, non-irritant)
- Material: PP non-woven fabric (30gsm) + Breathable film (30gsm) + glue (3gsm)

Lead time: TBD

Package: 40 pcs/carton





COVERALLS SIZE DETAILS

unit:cm

Model	Lenght	Chest	Sleeve length	Sleeve opening	Ankle opening
160	165	120	84	18	24
165	169	125	86	18	24
170	173	130	90	18	24
175	178	135	93	18	24
180	181	140	96	18	24
185	188	145	99	18	24
Error	±2	±2	±2	±2	±2

### Product Overview

### **Disposable Protective coveralls**

Item code: TWJ-Tape-01

Certificate: CE

None Sterile

According to: According to ISO 13485: 2016

- Recommended Industry: Can be used in outpatients, wards, inspection rooms, laboratories, medical operating rooms, etc. Isolated the virus effectively.
- Feature: High protection, special neckline heightening design; liquid is difficult to penetrate, Strong sealing performance; cotton knitted cuffs, elastic and comfortable; breathable material, anti-sweat.

• Product Style: Coveralls Color: White

• Lead time: 5000-12000 pcs/day

Package: 20pcs/box,40\*30\*35 cm, 4.95kg



05 PART

**VENTILATORS** 

Item code: PA-500

- Display: LED
- Ventilation Mode: A/C, IPPV, SIPPV, IMV, SIMV, MANUAL
- Minute Volume: Greater than or equal to 18L
- Back-up Power Supply: At least 4 hours
- Tidal Volume: Adjustable range: 50-1500ml, Display range: 0-2000ml
- Output Oxygen Concentration: <50%</li>
- Respiratory Rate: 6-60bpm
- Pressure Limit: 1-6kPa
- Inspiratory/Expiratory (I: E) Ratio: 1: 1.5-1: 3.0
- PEEP: 1-10cmH2O
- SIMV Rate: 1-12bpm
- Inspiratory Pressure Trigger: -4-10cmH2O
- Maximum Safe Operating Pressure: ≤6.0 kPa
- SIGH: 1 sigh breath in every 80-120 breaths
- Airway Pressure Alarm:
  - Upper Limit: 0.9~5.4kPaLower Limit: 0.5kPa
- Gas Supply Requirement: 280~600 kPa medical grade oxygen

# Product Overview

Size (mm): 660\*520\*1110 0.38CBM

Gross Weight(KG): 40

Lead time: TBD



*Item code: PA-700B-(IIII)* 

- Display: 10.4 inch high visibility color TFT display
- Ventilation Mode: A/C, IPPV, SIPPV, IMV, SIMV, Standby, SPONT MANUAL
- Minute Volume: Greater than or equal to 18L
- Back-up Power Supply: At least 4 hours
- Tidal Volume: Adjustable range: 50-1500ml, Display range: 0-2000ml
- Respiratory Rate: 1-99bpm
- Inspiratory/expiratory (I: E) Ratio: 4: 1-1: 4
- PEEP: 0-10cmH2O
- SIMV Rate: 1-20bpm
- Inspiratory Pressure Trigger: -10-10cmH2O
- Inspiratory Plateau: Adjustable from 0-50% of inspiratory time
- Adjustable Oxygen Concentration: 45-100%
- Gas Supply Requirement:  $280\sim600$  kPa medical grade oxygen and compressed air supply

### Product Overview

- Pressure Limit: 1.0kPa~6.0kPa
- Maximum Safe Operating Pressure: ≤6.0kPa
- Tidal Volume Alarm: Upper Limit: 10~2000ml, Lower Limit: 0~1800ml
- Airway Pressure Alarm: Upper Limit: 0.1~6kPa, Lower Limit: 0~5kPa
- Oxygen Concentration Alarm: Upper Limit: 22~100%, Lower Limit: 21~80%
- Air compressor PN-3000
- Size (mm): 660\*520\*390; 700\*700\*560; 440\*300\*380; 930\*265\*240
- Gross Weight(KG): 99 KG
- Lead time: TBD



### **Ventilator**

*Item code: PA-900B-(IIII)* 

- Minute Volume: Greater than or equal to 18L
- Back-up Power Supply: At least 4 hours
- Tidal Volume: Adjustable range: 20-1500ml, Display range: 0-2000ml
- Respiratory Rate: 1-99bpm
- Inspiratory/expiratory (I: E) ratio: 4: 1-1: 4
- PEEP: 0-10cmH2O
- SIMV Rate: 1-20bpm
- Inspiratory Pressure Trigger: -10-10cmH2O
- Trigger Sensitivity (flow): 1-10L/m
- Inspiratory Plateau: Adjustable from 0-50% of inspiratory time
- Adjustable Oxygen Concentration: 45-100%
- Gas Supply Requirement:  $280\sim600$  kPa medical grade oxygen and compressed air supply

### Product Overview

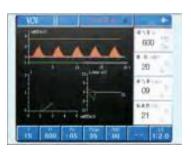
- Pressure Limit: 1.0kPa~6.0kPa
- Maximum Safe Operating Pressure: ≤6.0kPa
- Tidal Volume Alarm: Upper Limit: 10~2000ml, Lower Limit: 0~1800ml
- Airway Pressure Alarm: Upper Limit: 0.1~6kPa, Lower Limit: 0~5kPa
- Oxygen Concentration Alarm: Upper Limit: 22~100%, Lower Limit: 21~80%
- Air compressor PN-3000
- Size (mm): 650\*495\*470;
   700\*700\*560;440\*300\*380;930\*265\*240 101KG
- Lead time: TBD



### **Ventilator**

Item code: AV-2000B3

- Display: Large colored LED, big front display
- Temperature control: Nine gear temperature control system with heating protection function
- Simply respiratory
- Lead time: TBD







## Product Overview

 Applicable to internal medicine, surgery, gynecology, pediatrics, emergency, ICU and other departments of hospitals at all levels. (Built-in air compressor for external air supply.)



06 PART

**COVID-19 RAPID TESTS** 

# Product Overview

## **COVID-19 IgM/IgG Rapid Test**

*Item code: COVIDRT-2* 

- According to: Directive 98/79/EC, Article 9
- Works with: Finger stick, Whole Blood, Serum, or Plasma.
- Package: 5 Cassettes 5 Buffer Tubes 5 Alcohol Swabs
   25 Cassettes 2 Buffer Tubes 5 Lancets 5 Pipettes
- Lead time: TBD
- Certificate: CE

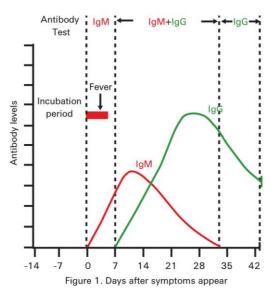
# COVISURETM

# COVID-19 IgM/IgG Rapid Test (For in Vitro Diagnostic Use Only)

- COVID-19 Positive/Negative Results in 15 Minutes
- Works with Fingerstick, Whole Blood, Serum, or Plasma
- Increased Screening with IgM and IgG Antibody Detection
- Ideal High-Volume Screening Device to Compliment Nucleic Acid Tests







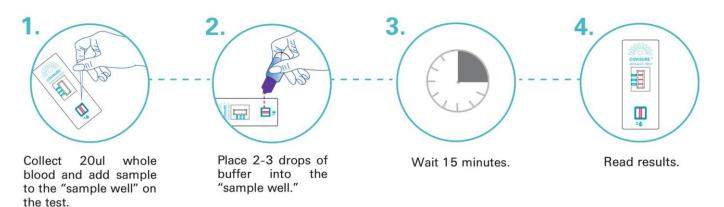
The human immune system is an incredibly effective defense mechanism in fighting and protecting the body against disease. When a patient is infected by the SARS-CoV-2 virus, the immune system will begin to form IgM antibodies as the first line of defense. While IgM antibodies are effective in the fight against infection, as the immune system mounts a more direct defense against the infection the body will begin to form specialized IgG antibodies. IgG antibodies are highly specific to the disease in question, they will appear in a later stage of the infection and remain in the body for some time after the infection has been defeated. The COVISURE COVID-19 IgM/IgG Rapid Test is designed to quickly detect and differentiate both the IgM and IgG antibodies produced by the immune system during a COVID-19 infection.

- The IgM antibody can be detected in patient specimen
   3-6 days after infection
- Positive result indicate a presumptive infection
- presumptive infection
   Negative results are a presumptive indication of no

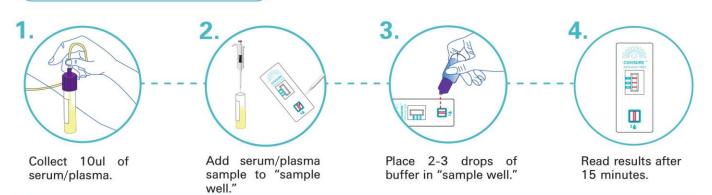
Analytes	COVID-19 IgM/IgG Ab
Sensitivity	93.3%
Specificity	100%
Accuracy	99.2%

# ► Testing Procedure & Results

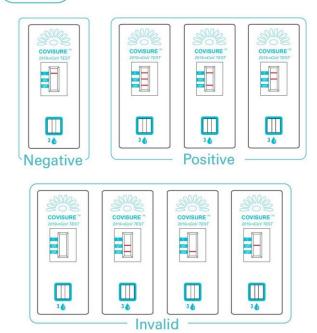
### Finger Stick/Whole Blood Sampling Procedure

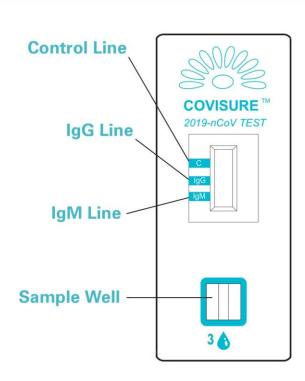


### Serum/Plasma Testing Procedure



### Results





### Rapid Test vs. Nucleic Acid

Test Results	Colloidal gold	Fluorescence-PCR
Test Time	15 minutes	3-4 hours
Operation Method	Simple without supporting equipment required	Complex with supporting equipment required
Portability	Highly portable and stable test device at room temperature. Testing can be conducted at Point of Care including certified small labs, clinics, or patient bedside.	Requires highly complex equipment only available in large hospitals

### SARS-COV-2 Antigen and IgG/IgM Antibody Test Results & Clinic Significance

Te	est Results		
PCR (Ag test)	IgM Ab	lgG Ab	Clinical Consideration
+	-	-	Patients may be in the "window period" of SARS-COV-2 infection.
+	+	-	Patient may be in the early stage of infection, and the body's immune response first produced the antibody IgM, but no IgG was produced or the IgG content did not reach the detection limit of the diagnostic reagent.
+	_	+	Patients may be in late or recurrent stage of infection.
+	+	+	Patient is in the active phase of infection, but the human body has developed some immunity to SARS-COV-2 (the persistent antibody IgG has been produced).
-	+	_	Patient may be in the acute phase of SARS-COV-2 infection. At this time, nucleic acid test result need to be considered (PCR may be false negative).
-	-	+	Patient may have been infected with SARS-COV-2 in the past, but the patient has been recovered or the virus in body has been cleared.
-	+	+	Patient has recently been infected with SARS-COV-2 and is in the recovery stage. Or the nucleic acid test result is false negative and the patient is in the active infection stage.

# Professional Lab Kit Includes: 25 Cassettes • 2 Buffer Tubes





### **Point of Care Kit Includes:**

5 Cassettes • 5 Buffer Tubes • 5 Alcohol Swabs 5 Lancets • 5 Pipettes

# **EC** Certificate



### Shanghai International Holding Corporation GmbH (Europe)

Eiffestrasse 80, 20537 Hamburg Germany

To whom it may concern

Ihre Zeichen YourRef. Unsere Zeichen

Datum

Our Ref. 02PBJ267

Date: March 9, 2020

### Declaration of Notification

The undersigned, JIN, Liang, General Manager of Shanghai International Holding Corporation GmbH (Europe), hereby declares that:

Hangzhou Clongene Biotech Co., Ltd.
No.1 Yichuang Road, Yuhang Sub-district, Yuhang District,
311121 Hangzhou
China

has signed the EC Declaration of Conformity in agreement with the Annex III of the European Directive 98/79/EC on In Vitro Diagnostic Medical Devices and has submitted the required technical documentation, for the following IVD product (for professional use only):

COVID-19 IgG/IgM Rapid Test

The notification to the German Competent Authorities has been carried out on March 9, 2020 by Shanghai International Holding Corporation GmbH (Europe), the appointed Authorized Representative of Hangzhou Clongene Biotech Co., Ltd.

JIN, Liang General Manager Shanghai International Hold

Tel.:(49) 40 2513175

Fax.:(49) 40 255726

shholding@hotmail.com

Authorized Representative

Amtsgericht Hamburg

HRB 56 583

Liang Jin

Geschäftshührer:

Finanzamt Hamburg

Steuer-Nr.22/795/00590 Ust-ID-Nr.DE166892350 Bankverbindungen SEB AG Hamburg BLZ 200 101 11

Konto:1343865200

# Product Information

### **COVID-19 IgM/IgG Rapid Test Cassette (WB/S/P)**

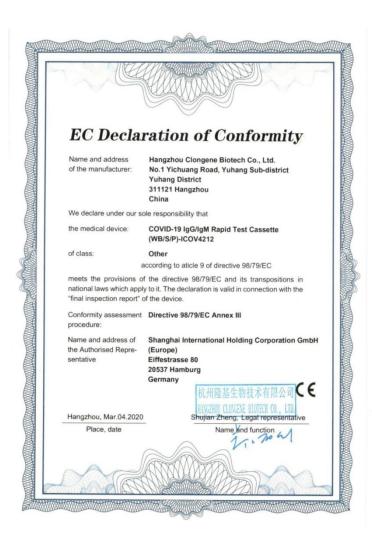
Item code: COVIDRT-1

According to: Directive 98/79/EC, Article 9

• Works with: Finger stick, Whole Blood, Serum, or Plasma

• Package: 25 Test Cassette

Lead time: TBDCertificate: CE



### Product Overview





### **Medical Nitrile Examination Gloves**

Item code: EG-1

• Standard: PPE

Package: 50 pairs/box\*10 boxes/carton

500pairs/carton

Dimension: 315\*232\*210mm

Weight: 0.98 inch-4.8kg/carton

1.3 inch-6.5kg/carton

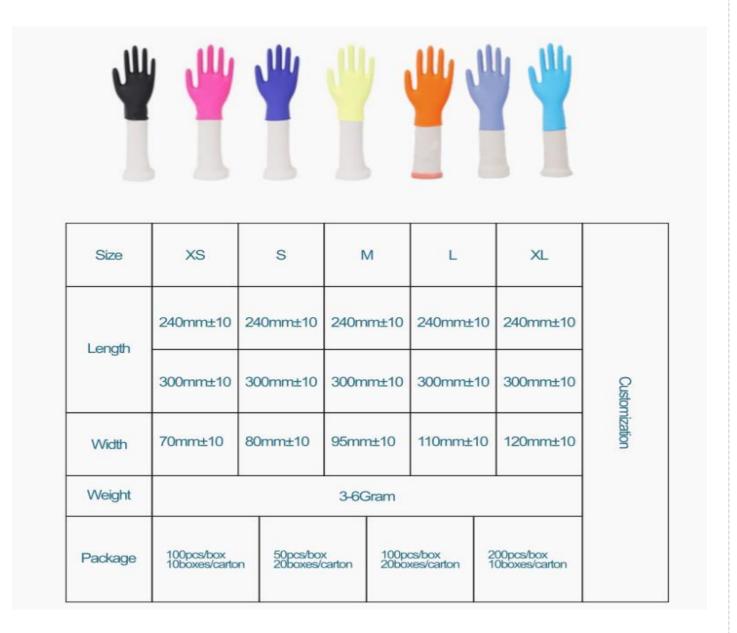
Lead time: 600,000 pcs/day

Certificate: CE



### Product Overview

Model: 9 inch S, M, I, XI, XXL 12 inch S, M, I, XI, XXL



### **Medical Protection Goggles**

Item code: G-3

• Standard:

• Package: 250pcs/carton

• Dimension: 860\*350\*480mm

• Weight: 10Kg

Lead time: 7 days

• Certificate: CE



### Product Overview

### **Protection Goggles**

Item code: G-1

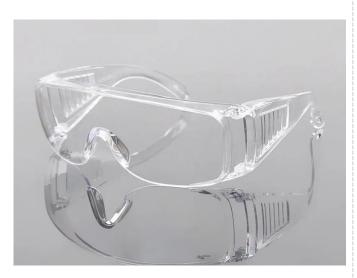
• Standard: PPE

• Package: 300boxes/carton

• Dimension: 850\*330\*480mm

Weight: 17KgLead time: 7 days

• Certificate: Without CE



Item code: G-2

• Standard: PPE

Package: 480 boxes/carton

Dimension: 800\*330\*550mm

Weight: 24KgLead time: 7 days

• Certificate: Without CE





*CE* >>>

### First Generation: Spraying Machine



In the early years, hospital usually spray the disinfectant aerosol in the room. It is easy to attach on the surfaces, easy corrosion and difficult to remove the residues.

Its' disinfection effect is not ideal and is harmful to human.

In order to protect the human safety, the dry fogger is developed. Its' droplet is smaller. But it is still aerosol/fog in nature.

### Second Generation: Dry Fogger



### Third Generation: Vaporized Hydrogen Peroxide (VHPS) Generator



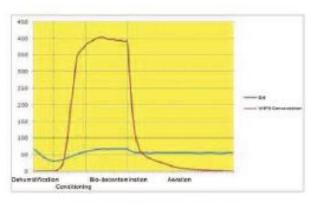
The VHPS generator can vaporize the H<sub>2</sub>O<sub>3</sub> to gaseous phase. Which is easier to spread to the dead corner. It is low corrosion and no residue.

Items	VHPS	Dry Fog
Molecular	0.5nm	10um
Principle	Vaporization	High pressure spray
Disinfectant	35% H <sub>z</sub> O <sub>2</sub> solution	5% H <sub>2</sub> O <sub>2</sub> solution,50ppm silver ions
Sterilization effect	6-log	4-log
Sterilization Time	Short	Long
Residue Removal	Fast, Easy	Slow, has potential risk
Compatibility	Low corrosion risk	High corrosion risk

### ♦ VHPS® Technology Introduction

VHPS" technology is to vaporize 35% hydrogen peroxide to be gaseous phase, and transporting it into pipeline or spread it directly in space for bio-decontamination. In the vaporization process, the H<sub>2</sub>O<sub>2</sub> will generate free hydroxyl which can damage the cellular component (such as lipid, protein and DNA) by oxidation. The VHPS" can kill bacterial, fungi, viruses and other kinds of microorganisms.

It is suitable for air and surfaces sterilization under dry, room temperature and normal pressure/vacuum/positive pressure conditions





Dry VHPS Sterilization Cycle

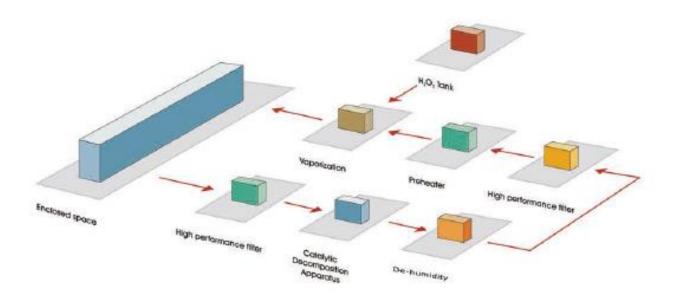
Bacillus Stearothermophilus

### VHPS Working Principle

VHPS technology maintains the VHPS under "condensation point" in the bio-decontamination process. When reaching the expected concentration, it will control the VHPS humidity to avoid the humidity saturation.

The biggest advantage of dry VHPS is it can minimize the impact on materials while achieving the expected decontamination effect.

What's more, it can reduce the residue removal time



Ultra-small VHPS specially designed for sterilizing the ambulance, emergency aircraft/helicopter and mobile laboratories.



To avoid the infection risk, it is automatically controlled which can reduce the involvement of personnel.

### **On-Board VHPS Generator**

The VHPS generator is put in the ambulance, while the control box is put outside.

They are connected by communication cable.

All the everyday operation can be controlled by the control box.









### (L\*W\*H):224\*120\*325mm

# Parameters Shell Material: SUS 304# Voltage: AC220±22V 50Hz Power: <1000W Injection Speed: 0-6g/min Sterilant: 35%H<sub>2</sub>O<sub>2</sub> solution Bottle Volume: 100ML Control Mode: PLC, control box with remote controller Weight: Machine:21Kgs; Control Box: 5Kgs

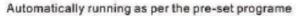




### **Features**

### Programmed







Reduce the medical staffs' infection risk



# VHPS® SUPER SD Basic



### Technical Parameters

L*W*H: 360*360*970 mm	Net Weight: 45kgs
Sterilization Capacity; ≤200m <sup>3</sup>	Powersupply: AC220V/50HZ
Injection speed: 1-7g/min.	Air flow rate: 20m³/h
Total injection: 1000ml	Max. power consumption: 2KW
Control mode: Remote control	Display: Colorful touch screen
Bio-decontamination : 6-log reduce (Bacillus stearothermophilus)	Sterilant: 35% H <sub>2</sub> O <sub>2</sub> (food grade)



### Advantages

### Broad spectrum sterilization:

It is effective to bacteria (vegetative and spores, viruses and fungi.

The VHPS technology could apparently low the spread possibility of hospital bacteria. It could quickly kill the common hospital bacteria such as MRSA, VRE, KPN, Clostridium Botulinum spores, Serratia marcescens, C-diff, M.tuberculosis, Rotavirus and Influenza A virus etc.

### High efficiency:

6-log reduction rate against Bacillus stearothermophilus (ATCC#7953)

#### Eco-friendly:

No toxicant residues, it is decomposed to H2O and O2 finally.

#### Safety

It is compatible with most of the materials.

#### Convenient

It is equipped with touch screen which is easy to use.

### Low usage cost:

It is economical sterilization technology.

#### Services

We provide validation service, training service and SAT service.

### Applications

It could sterilize these space and equipments in hospital: ICU, Negative pressure isolation rooms, infectious ward, Virus and bacterial labs, Surgery, Ambulance, Pathology Dept., Laboratories and Supply Dept. The VHPS Generator could be for emergency use, when the hospital is contaminated or the remained viruses and bacteria will bring risks to the new patients.









P3 Lab in Sierra Leone

### How to use

Put the VHPS Generator in the relevant area which needed sterilization;

Seal the room or ambulance;

Wire up and start the VHPS Generator;

Setup the parameters on the remote touch screen and start sterilization;

Remove the residuals by ventilation or naturally and make sure the concentration is less than 1ppm.





# HAND SANITIZERS



# 75% Instant Hand Stanitizer Family offer

CLEACE 75% alcohol instant hand stanitizer kills 99.99% germs. Effectively kills Staphylococcus aureus, E. coli, Candida albicans, etc.



500ml\*24pcs/ctn



500ml\*24pcs/ctn



500ml\*24pcs/ctn

# 75% Instant Hand Stanitizer Utility Series

CLEACE 75% alcohol instant hand stanitizer kills 99.99% germs. Effectively kills Staphylococcus aureus, E. coli, Candida albicans, etc.



1L\*15pcs/ctn



1.18L\*10pcs/ctn



1.5L\*10pcs/ctn



5L\*3pcs/ctn



# 75% Instant Hand Stanitizer Small Portable

CLEACE 75% alcohol instant hand stanitizer kills 99.99% germs. Effectively kills Staphylococcus aureus, E. coli, Candida albicans, etc.



29ml\*36pcs/case 8 cases/ctn



60ml\*24pcs/case 8 cases/ctn



100ml\*20pcs/case 6 cases/ctn



236ml\*24pcs/ctn

# 84 Bleach Series

CLEACE 75% alcohol disinfectant liquid kills 99.99% germs. Effectively kills Staphylococcus aureus, E. coli, Candida albicans, etc.



BL500JYN 500g\*12pcs/ctn



BL1000JYN 1kg\*15pcs/ctn



BL5000JYN 5kg\*3pcs/ctn



BL20kgJYN 20kg/bottle

# 75% Alcohol Disinfection Spray Family Series

CLEACE 75% alcohol disinfectant Spray kills 99.99% germs. Effectively kills Staphylococcus aureus, E. coli, Candida albicans, etc.







# 75% Alcohol Disinfection Liquid Utility Series

CLEACE 75% alcohol disinfectant liquid kills 99.99% germs. Effectively kills Staphylococcus aureus, E. coli, Candida albicans, etc.







10L/bottle



20L/bottle

# **Hand Washing Liquid**

CLEACE 75% alcohol disinfectant liquid kills 99.99% germs. Effectively kills Staphylococcus aureus, E. coli, Candida albicans, etc.



500ml\*24pcs/ctn



500ml\*24pcs/ctn



1.18L\*10pcs/ctn



1.5L\*10pcs/ctn