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UGAIYA

Rapid Readout Biological System

☆ Rapidest Operation



Steam

Steam

Auto Reader

Ugaiya Rapid Reader adopts spectrum analysis technology to monitor the fluorescence changes of the Bacillus Stearothermophilus with special enzyme to rapidly judge whether there is surviving spores. The Reader is compatible with most popular rapid readout biological indicators in the market and can be used to validate the sterilization efficacy of sterilizers. The Rapid Reader is able to make judgments within 20~240 minutes to ensure implantation operations can be carriedout in time, and in the meantime, a report can be printed for traceability.

UG-AR100 Reader For 60min steam B.I.

UG-AR300 Reader For 180min steam B.I.

Features

Language

• Multiple languages.

Indication Light

• Incubation status and working status of the incubator can be shown by the indication light.

Display

• Incubation time and temperature are displayed at the same time for convenient checking.

Progress Checking

• Display the current status, incubation countdown, fluorescence strength (percentage) and incubation result.

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Smart Recognition

• Most non-BI articles can be recognized.

• Available BI can be indicated automaticly, without manual confirmation. If you want to check during the process, put it back within specific time, the system will continue to incubate.

• Touch the screen to stop the alarm.

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Smart Monitoring

• Open communication protocal compatible with traceability system for instant reporting.

Smart Alarm

- Instant self-test, fault safety protection.
- Visual and sound alarm for fault and result.

UG-AR500 Reader For 240min EO B.I.

UG-AR400 Reader For 6 Types B.I.

Smart Cloud Service

• Possibility of user change with incubations in progress.

• Incubation and sterilization record can be accociated and checked by IE Browser & PC software.

Smart Checking

• History incubation record can be checked by associated monitoring software.

• History report can be customized and printed.

Smart User-Friendly Design

• With an easy handling as well as a clear and well arranged display for real-time monitoring of the incubation process.

Parameters

Model	UG-AR400	UG-AR100	UG-AR300	UG-AR500	UG-AR901
For BI types	Six types	UGBI0101	UGBI0301	UGBI0401	UGBI0901
Rated Power(W)	20	20	20	20	20
Power Supply	DC 12V 3A	DC 12V 3A	DC 12V 3A	DC 12V 3A	DC 12V 3A
Ambient Temp.	5°C-40°C	5°C-40°C	5°C-40°C	5°C-40°C	5°C-40°C
Ambient RH	\leqslant 95%(noncondensing)	\leqslant 95%(noncondensing)	\leqslant 95%(noncondensing)	\leqslant 95%(noncondensing)	\leqslant 95%(noncondensing)
Ambient Pressure	Atmospheric Pressure	Atmospheric Pressure	Atmospheric Pressure	Atmospheric Pressure	Atmospheric Pressure
Incubation Temp.	58±2°C & 36±1°C(adjustable)	$58\pm2^{\circ}C(adjustable)$	$58\pm2^{\circ}C(adjustable)$	$36 \pm 1^{\circ}C(adjustable)$	$58\pm2^{\circ}C(adjustable)$
Judgment Time	4~240 min	15~60 min	30~180 min	60~240 min	15~60 min
Incubation Slots	8	8	8	8	8
Screen	7" TFT touch screen	7" TFT touch screen	7" TFT touch screen	7" TFT touch screen	7" TFT touch screen
Net Weight(kg)	1	1	1	1	1
Exterior Dimension	246X214X100(mm)	246X214X100(mm)	246X214X100(mm)	246X214X100(mm)	246X214X100(mm)
USB	Υ	Υ	Y	Y	Y
LAN	Y	Y	Y	Y	Y
Input	~100V-240V 50/60Hz	~100V-240V 50/60Hz	~100V-240V 50/60Hz	~100V-240V 50/60Hz	~100V-240V 50/60Hz
Output	DC 12V 3A	DC 12V 3A	DC 12V 3A	DC 12V 3A	DC 12V 3A

Rapid Readout Biological Indicators

Advantages

Model	UGBI0201	UGBI0101	UGB10301	UGBI0102	UGBI0401	UGB10103
Application	Vacuum&Gravity	Vacuum&Gravity	Vacuum&Gravity	Hydrogen peroxide vapor	Ethylene oxide	Formaldehyde vapor
Organism	G-stearothermophilus	G-stearothermophilus	G-stearothermophilus	G-stearothermophilus	Bacillus atrophaeus (ATCC 9372)	G-stearothermophilus
Population (mean/strip)	≥1.0x10 ⁶ c.f.u.	≥1.0x10 ⁶ c.f.u.	≥1.0x10 ⁶ c.f.u.	≥1.0x10°c.f.u.	≥1.0x10 ⁶ c.f.u.	≥1.0x10°c.f.u.
D-value	\geqslant 1.5 min(121°C steam)	\geqslant 1.5 min(121°C steam)	\geq 1.5 min(121°C steam)	\geq 1s (50°C,5mg/L VH ₂ O ₂)	≥2.5 min ^{(54±1°C,60±10% RH,} EO 600±30mg/L)	≥6 min (60±0.5 °C, 1.0± 0.01 mol/L LTSF)
Incubation Time	4min~20min(readout)	15min~60min(readout)	30min~180min(readout)	4min~20min(readout)	60min~240min(readout)	15min~60min(readout)
Frequency of Use	Test 1 time every sterilization cycle	Test 1 time every sterilization cycle	Test 1 time every sterilization cycle			
Packing	50pcs/Box	50pcs/Box	50pcs/Box	50pcs/Box	50pcs/Box	50pcs/Box

- Provides results in 20~240 minutes.
- Applicable for 121°C gravity &132~135°C vacuum steam, EO, LTSF and VH_2O_2 sterilization cycles.
- Self-contained biological indicators significantly reduce possibility of cross infection, minimizing false positives and assuring more precision results.
- Fast result time to ensure quarantine every load and eliminate recalls.
- It helps reduce the costs associated with fighting infections both money and time wasted.

Incubator

UG-AI400 Incubator For 24~48H B.I.

Advantages

Safety

 Double temperature control to limit temperature safely.

..... Features

Automatically

 Automatic malfunction detecting and error code display.

Smart Checking

Display • Real time temperature display. • LED display.

• Equal temperature automatically without

deviation and no need to calibrate.

Smart User-Friendly Design 🔫

• Incubation rack is dismountable

• Average power: 8W.

mobile and rotatory.

..... Parameters

	Model	UG-A1400
Electrical Data	Rated Power(W)	25
	Power Supply	DC 12V 3A
	Temperature Range	From Temp. Room to 80 degree
	Warming-up Time(from 20 to 56degree)	About 10mins
Functions	Temp. Precision	±0.5°C
	Display Precision	0.1 °C
	Incubation Slots	12~19
	Screen	LED
Dimensions	Net Weight(kg)	1.2
Dimensions	Exterior Dimension(W*D*H)	205X135X215(mm)
Power Adaptor	Input	~100V-240V 50/60Hz
Power Adaptor	Output	DC 12V 3A

Biological Indicators

9000 C Parameters

Biological Indicator For Steam

Model	UGBI0501
Packing	50pcs/Box
Organism	G-stearothermophilus ATCC7953
Population(mean/strip)	≥1.0x10 ^s c.f.u.
D-value	≥1.5 min(121°C)
Incubation Time	24~48H
Frequency of Use	Test 1 time every sterilization cycle

Biological Indicator For VH ₂ O ₂		
Model	UGB10502	
Packing	50pcs/Box	
Organism	G-stearothermophilus ATCC7953	
Population(mean/strip)	≥1.0x10 ⁶ c.f.u.	
D-value	\geq 1s (50°C,2.3mg/L VH ₂ O ₂)	
Incubation Time	24~48H	
Frequency of Use	Test 1 time every sterilization cycle	

Biological Indicator For EO		
Model	UGB10503	
Packing	50pcs/Box	
Organism	Bacillus atrophaeus ATCC 9372	
Population(mean/strip)	≥1.0x10 ⁶ c.f.u.	
D-value	≥2.5 min(54°C,60% RH,600mg/L EO)	
Incubation Time	24~48H	
Frequency of Use	Test 1 time every sterilization cycle	

Biological Indicator For Dry Heat		
Model	UGB10504	
Packing	40pcs/Box	
Organism	Bacillus atrophaeus ATCC 9372	
Population(mean/strip)	≥1.0x10 ⁶ c.f.u.	
D-value	≥2 min(160±1°C)	
Incubation Time	24~48H	
Frequency of Use	Test 1 time every sterilization cycle	

Biological Indicator For LTSF		
Model	UGB10505	
Packing	50pcs/Box	
Organism	G-stearothermophilus ATCC7953	
Population(mean/strip)	≥1.0x10 ⁶ c.f.u.	
D-value	≥6 min(1±0.01mol/L,60±0.5°C)	
Incubation Time	24~48H	
Frequency of Use	Test 1 time every sterilization cycle	

Biological Indicator For Water Spray		
Model	UGB10506	
Packing	50pcs/Box	
Organism	Bacillus subtilis ATCC 35021	
Applicable temperature	105~121°C	
Population(mean/strip)	≥1.0x10 ^e c.f.u.	
D-value	≥1.5 min(121°C)	
Incubation Time	24~48H	
Frequency of Use	Test 1 time every sterilization cycle	

Parameters

B.I. for H_2O_2 space disinfection

Model	UGBI0601
Packing	50pcs/Box
Organism	G-stearothermophilus ATCC7953
Population(mean/strip)	≥1.0x10 ⁶ c.f.u.
D-value	\geq 1.5 min(1500mg/m ³ 15~30°C)
Incubation Time	24~48H
Frequency of Use	Test 1 time every cycle

B.I. for H_2O_2 space disinfection		
Model	UGB10602	
Packing	50pcs/Box	
Organism	G-stearothermophilus ATCC7953	
Population(mean/strip)	≥1.0x10 ⁴ c.f.u.	
D-value	\geq 1.5 min(1500mg/m ³ 15~30°C)	
Incubation Time	24~48H	
Frequency of Use	Test 1 time every cycle	

Rapid readout B.I. for H₂O₂ space disinfection

Model	UGB10901
Packing	50pcs/Box
Organism	G-stearothermophilus ATCC7953
Population(mean/strip)	≥1.0x10 ⁶ c.f.u.
D-value	\geq 1.5 min(2000mg/m ³ 15~30°C)
Incubation Time	15~60min
Frequency of Use	Test 1 time every cycle

Spore strips For Steam		
Model	UGBS0501	
Packing	200pcs/Pack	
Organism	G-stearothermophilus ATCC7953	
Population(mean/strip)	≥1.0x10 ⁵ c.f.u.	
D-value	≥1.5 min(121°C)	
Incubation Time	24~48H	
Frequency of Use	Test 1 time every sterilization cycle	

Spore strips For Dry Heat/EO		
Model	UGBS0503	
Packing	200pcs/Pack	
Organism	Bacillus atrophaeus ATCC 9372	
Population(mean/strip)	≥1.0x10 ^e c.f.u.	
D-value	≥2.5 min(54°C,60% RH,600mg/L EO) ≥2 min(160±1°C)	
Incubation Time	24~48H	
Frequency of Use	Test 1 time every sterilization cycle	

Parameters

Mini strips For Steam

Model	UGMS0501
Packing	200pcs/Pack
Organism	G-stearothermophilus ATCC7953
Population(mean/strip)	≥1.0x10 ⁵ c.f.u.
D-value	≥1.5 min(121°C)
Incubation Time	24~48H
Frequency of Use	Test 1 time every sterilization cycle

Mini strips For VH ₂ O ₂		
Model	UGMS0502	
Packing	200pcs/Pack	
Organism	G-stearothermophilus ATCC7953	
Population(mean/strip)	≥1.0x10 ⁶ c.f.u.	
D-value	\geq 1s (50°C,2.3mg/L VH $_2O_2$)	
Incubation Time	24~48H	
Frequency of Use	Test 1 time every sterilization cycle	

Mini strips For Dry Heat/EO		
Model	UGMS0503	
Packing	200pcs/Pack	
Organism	Bacillus atrophaeus ATCC 9372	
Population(mean/strip)	≥1.0x10 ⁶ c.f.u.	
D-value	≥2.5 min(54°C,60% RH,600mg/L EO) ≥2 min(160±1°C)	
Incubation Time	24~48H	
Frequency of Use	Test 1 time every sterilization cycle	

Process Challenge Device Series

Culture Medium

Parameters

Culture Medium For Steam/VH ₂ O ₂ /LTSF		
Model	UGIM0501	
Packing	40pcs/Box	
Initial color	Purple	
Final color(positive)	Yellow	
Medium volume	2ml	
Incubation Time	24~48H	
Frequency of Use	Test 1 time every sterilization cycle	

Culture Medium For Dry Heat/EO		
Model	UGIM0503	
Packing	40pcs/Box	
Initial color	Green	
Final color(positive)	Yellow	
Medium volume	2ml	
Incubation Time	24~48H	
Frequency of Use	Test 1 time every sterilization cycle	

It is very important to ensure VH₂O₂ Sterilization result in each cycle, as it be effected from many factors:

- Concentration of Agent(Hydrogen Peroxide)
- Vaporization Quality
- Injection Volume
- Temperature of Chamber
- Cleaning/dryness of loaded instruments
- Packing method
- Loading method
- Etc.

The inner diameter of the PTFE tube is 1mm and the length is 2 meters

For VH₂O₂

Process Challenge Device for VH₂O₂ Sterilizer UGPD-02

Advanced Monitoring/ Validation Tools

Structure

Advantages

Rapidly and Accurately

• After the PCD can be used with our rapid BI, the result can be obtained within 20 minutes, The result is accurate and meets international standards.

Very easy to load

• It is very convenient to load and take out BI. Routine training is carried out in the reader to increase the turnover rate.

Ensure sterilization results

• Completely simulate the structure of lumen instruments to ensure the sterilization results of lumen instruments.

Safe and reliable

• Both the compatibility of materials and the sealing are also very good, which ensures the high challenge resistance and stability of PCD.

• Frequency of Biological Testing should be at least once per day or in accordance with your policy

• Priority of sterilization monitoring Domestic laws ISO standard Manufacturer's instructions

Type 5

Rapidly and Accurately

Safe and Economy

CI for VH₂O₂ PCD

Naked BI & CI(Chemical Indicator) can not check the sterilization results for lumen instruments:

- Naked BI is only to check instruments without lumen
- Class 1 Cl is only to ensure the sterilizer injected Agent (Hydrogen Peroxide) into the chamber normally
- Normal PCD is to ensure the sterilization results, but needs the incubation time

Loading of BI to be sterilized

VALUE VALUE Understand tool VALUE VALUE VALUE

Advantages

Rapidly and Accurately

For Steam

• After the PCD can be used with our rapid BI, the result can be obtained within 20 minutes, The result is accurate and meets international standards.

Ensure sterilization results

• Completely simulate the structure of instrument box to ensure the sterilization results of metal instrument box.

Safe and reliable

• Both the compatibility of materials and the sealing are also very good, which ensures the high challenge resistance and stability of PCD.

Spring o-----

Process Challenge Device for Steam Sterilizer

UGPD-01

Advanced Monitoring/ Validation Tools

It is very important to ensure Steam Sterilization result in each cycle, as it be effected from many factors:

- Saturation of steam
- Steam uniformity
- Temperature of chamber
- Cleaning/dryness of loaded instruments
- Packing method
- · Loading method
- Etc.

Very easy to load

• It is very convenient to load and take out BI. Routine training is carried out in the reader to increase the turnover rate.

