

**SANWOOD** 三木<sup>®</sup>



**We are gald to be the ODM/OEM manufacturer of environmental test chambers sales enterprises all over the world**

Ищем партнеров, для которых произведем оборудование. Мы Ваш ODM/OEM.



## Company Introduction Описание компании

Sanwood Environmental Chambers was established in 1995, which integrated Taiwan and Japan technologies. We have been focus on the most secure and reliable climatic test chamber technology since established. And has become a private science and technology enterprises in Dongguan,Guangdong Province, which passed the ISO9001:2008 quality system certification.

Our products upgrade constantly and our customers come portable batteries, power batteries, battery, lithium batteries, lead-acid, new energy vehicles, electric bicycles, electric tools, electric systems, solar, military, universities research and other technology industries fields.

Having experienced nearly 20 years efforts, we have successfully developed a series of products: High and low temperature test chamber , temperature fast change test chamber, altitude test box, explosion-proof type hot box, explosion-proof type thermal shock chamber, explosion-proof type walk-in temperature and humidity chamber, an explosion-proof type high and low temperature test box, rain test chamber, dust test box, weather resistance test chamber, seawater immersion box, Temperature&humidity&Vibration integrated test chamber, battery thermal abuse test box, ozone test box, xenon lamp weather resistance test chamber, high temperature oven, cell turnover test machine, washing test machine, vibration table, impact tester and other equipment. All of products meet GB31241、IE62133、QCT/743、UN38.3、UL2054 Standard. And we have had a good cooperation with ATL, Sony, Sunwoda, Desay, Samsung, BYD, Toyota, Yutong Bus, Nissan, Guangdong Province entry-exit, Tsinghua University, Henan University, Chinese Academy of Sciences, Central South University Successfully.

Enterprise vision: Sanwood Technology has established a large production base in Dongguan after many years efforts. The plant area reached more than 12000 square meters. The foreign trade branch and foreign service agencies were established in 2010. And branches successively established in Taiwan, Suzhou, Hunan, Hubei, Beijing, Henan. Excellent products and good after-sales service make us won the recognition and trust of customers. Products are exported to more than 30 countries, such as Russia, Singapore, the United States, Turkey, Denmark, Vietnam, India, Malaysia, Kazakhstan, Austria, Canada, etc. In the age with fierce competitions, Sanwood thrived little by little and aims to become the leading brand in the safety and reliability environmental test equipment industry all over the world.



Компания "Sanwood" была создана в 1995 году, объединили технологии Тайваня и Японии. Мы сосредоточим всё внимание на технологиях производства климатических камер и испытательных оборудований. Компания стала научно-техническим предприятием в провинции Гуандуне, и получила сертификат ISO9001:2008.

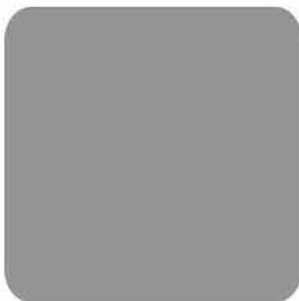
Мы непрерывно движемся вперёд, делаем нашу продукцию все лучше и лучше, у нас клиенты из разных сфер. Например: переносная батарея, новые виды энергии, электротепел, гелиоэнергия, военная промышленность, научно-исследовательский институт, и т.д.

Почти 20 лет, мы уже накопили богатые опыты, мы успешно разработали серию продуктов. Наш основной продукт: климатическая камера тепло-холод-влаги, термошок, ксенонная камера, озоновая камера, камера дождя, камера с УФ-облучением, камера песка и пыли, камера соленого тумана, Термобарокамера, вибростенд, walk-in камера, и т.д. Помимо выпуска серийной продукции, мы имеем возможность разработки и поставки опытных образцов лабораторного оборудования "под заказ" по Вашим техническим требованиям. Наши оборудования соответствуют стандарты GB31241, IE62133, QCT/743, N38.3, UL2054, и получили 12 патентов. И мы имели хорошее сотрудничество с ATL, Sony, Sunwoda, DESAY, Samsung, BYD, Toyota, Yutong Bus, Nissan, Университет Цинхуа и т.п.

Через старания, "Sanwood" уже создала производственную базу в городе Дунгуане, площадь около 12000 м<sup>2</sup>. В 2010-ом году, мы установили внешнеторговый филиал и отделение фирмы в Сучжоу, Хунань, Хубэй, Фошань. У нас большая группа, можем предоставить хороший послепродажный сервис, и получили доверие и поддержки клиентов. Продукция экспортируется в более чем 30 странах, таких как Россия, Сингапур, США, Турция, Дания, Вьетнам, Индия, Малайзия, Казахстан, Австрия, Канада и т.д. Усиленно стать известным производителем всему миру в отрасли климатического оборудования

# Packaging & Shipping process

## Процесс упаковок и поставки



# Certification

## Сертификаты



# Company culture

## Культуры КОМПАНИИ



# Assembly and commissioning Монтажно-настроечная работа



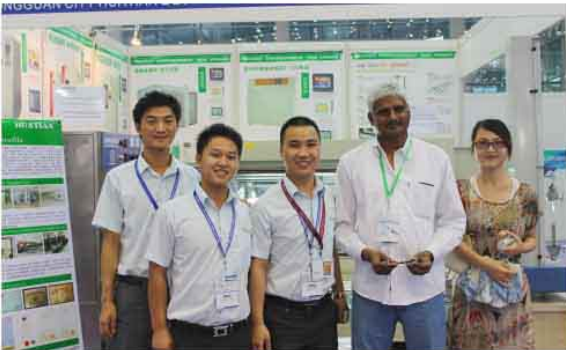
# Customer witness

## Посещение КЛИЕНТОВ



# Sanwood Exhibition

## Sanwood на выставке



## High low temperature test chamber климатическая камера тепло-холод



### Data sheet

Model	Unit	SM-64-CC	SM-80-CC	SM-150-CC	SM-225-CC	SM-408-CC	SM-800-CC	SM-1000-CC	SM-1500-CC	
Test volume	L	64L	80L	150L	225L	408L	800L	1000L	1500L	
Temperature range	°C	-70°C~180°C (A:0°C;B:20°C;C:40°C;D:70°C)								
Fluctuation	°C	±0.3~±1.0		±0.1~±0.5			±0.1~±0.6			
Uniformity	°C	±0.5~±2.0		±0.5~±1.5			±0.5~±1.6			
Heating rate	°C/min					3.0°C~5.0°C/min				
Cooling rate	°C/min					1.0°C~2.0°C/min				
Inner size	Width mm	400	400	500	500	800	1000	1000	1200	
	depth mm	400	400	500	600	600	800	1000	1000	
	height mm	400	500	600	750	850	1000	1000	1250	
Outside size	Width mm	680	700	800	800	1100	1300	1300	1500	
	depth mm	900	1220	1320	1420	1420	1620	1820	2300	
	height mm	625	1450	1550	1700	1800	1980	1980	1600	
Maximum load	kg/m <sup>2</sup>	40	200		300		400		800	
Noise level	dB(A)Ⅲ	50	52	54	55	56	60	60	65	
Power supply		230V±10%,1/N,50HZ					400V±10% · 3/N/PE,50HZ			
Power	Kw	4.2	4.8	5.9	7.5	8.9	11.6	13.5	15.5	
Cooling mode		Air-cooled								
Control system	pcs	The South Korea SAMWON TEMI1500·TEMI2500·TEMI2700								



## Temperature and humidity testing chamber климатическая камера тепло-холод-влага



### Data sheet

Climatic chamber	Model	Unit	SMC-64-CC	SMC-80-CC	SMC-150-CC	SMC-225-CC	SMC-408-CC	SMC-800-CC	SMC-1000-CC	SMC-1500-CC
Test volume		L	64L	80L	150L	225L	408L	800L	1000L	1500L
Temperature range		°C	"-75°C~+180°C(A:0°C;B-20°C;C-40°C;D-75°C)"							
Humidity range		%R.H	10 ~ 98							
Dew-point temperature		°C	+10 ~ +95							
Dew-point temperature range		°C	+4 (-3°C) ~ +94							
Humidity fluctuation		%r.h	±1.0 ~ ±3.0							
Temperature change		°C	fluctuation±0.1 ~ ±0.5 · uniformity±0.5 ~ ±2.0							
Heating rate		°C/min	3.0°C ~ 5.0°C							
Cooling rate		°C/min	1.0°C ~ 2.0°C							
Highest thermal compensation		W	200W	400W	400W	400W	500W	500W	600W	600W
Inner size	Width mm		400	400	500	500	800	1000	1000	1200
	depth mm		400	400	500	600	600	800	1000	1000
	height mm		400	500	600	750	850	1000	1000	1250
Outside size	Width mm		680	700	800	800	1100	1300	1300	1500
	depth mm		900	1220	1320	1420	1420	1620	1820	2300
	height mm		625	1450	1550	1700	1800	1980	1980	1600
Power supply			230V±10%,1/N,50HZ				400V±10% · 3/N/PE,50HZ			
Power		Kw	4.8	5.8	6.5	8.5	8.9	11.6	13.5	15.5
Noise level		dB(A)	50	52	54	55	56	60	60	65
Weight		kg	470	280	380	450	620	680	840	955
Cooling mode			air-cooled							
Control system		pcs	The South Korea SAMWON TEMI1500·TEMI2500 · TEMI2700							

## Landing type temperature and humidity testing chamber напольная камера тепло-холод-влага



### Data sheet

Model	Unit	SMC-1800-CC	SMC-2520-CC	SMC-3600-CC	SMC-3960-CC	SMC-5000-CC
Test volume	L	1800L	2520L	3600L	3960L	5000L
Temperatuer range	°C	-75°C~+180°C(Whole structure)(A:0°C;5-20°C;C-40°C;D-75°C)				
Humidity range	%RH	10 ~ 98				
Dew-point temperature	°C	+10 ~ +95				
Dew-point temperature range	°C	+4 (-3°C) ~ +94				
Relative humidity fluctuation	%rh	±1.0 ~ ±3.0				
Temperature change	°C	fluctuation±0.1 ~ ±0.5 · Evenness±0.5 ~ ±2.0				
Heating rate	°C/min	3.0°C~5.0°C				
Cooling rate	°C/min	1.0°C~2.0°C				
The inner size mm	Wide	1000	1200	1200	1200	1500
	Deep	1200	1400	1500	1500	1800
	High	1500	1500	2000	2200	1850
The outside size mm	Wide	1250	1450	1450	1450	1750
	Deep	2400	2600	2700	2700	3000
	High	1700	1700	2200	2400	2050
Power supply		400V±10% · 3/N/PE,50HZ				
Power	Kw	16.8	19.8	21.8	22.5	23.5
Noise level	dB(A)	65	65	65	65	65
Cooling mode		Water-cooled				
Control system	pcs	The South Korea SAMWON TEMI1500·TEMI2500 · TEMI2700				

## Walk in temperature and humidity testing chamber

## Walk-in климатическая камера тепло-холод-влага



### Data sheet

Model	Unit	SMC-080-WT	SMC-120-WT	SMC-160-WT	SMC-250-WT	SMC-340-WT	SMC-400-WT
Test volume	L	8.0m <sup>3</sup>	12.0m <sup>3</sup>	16.0m <sup>3</sup>	25.0m <sup>3</sup>	34.0m <sup>3</sup>	40.0m <sup>3</sup>
Temperature range	°C	-60°C ~ +80°C / +100°C (Split Composite Structure) (A:0°C; B:-20°C; C:-40°C; D:-60°C)					
Humidity range	%R.H	20~98					
Dew-point temperature	°C	+20~+85					
Dew-point temperature range	°C	+4 (-3°C) ~ +94					
Relative humidity fluctuation	%rh	1.0~5.0					
Temperature change	°C	fluctuation ±0.1 ~ ±1.5 · Evenness ±0.5 ~ ±3.0					
Heating rate	°C/min	3.0°C ~ 5.0°C					
Cooling rate	°C/min	0.7°C ~ 1.5°C					
Test space dimensions	Wide)mm	1970	3020	4070	3020	4070	5120
	Deep)mm	1970	1970	1970	4070	4070	4070
	High)mm	2100	2100	2100	2100	2100	2100
External dimensions	Wide)mm	2900	3920	4970	3920	4970	6020
	Deep)mm	2300	2300	2300	4370	4370	4370
	High)mm	2400	2400	2400	2400	2400	2400
Power		400V±10% · 3/N/PE,50HZ					
Rated power	Kw	21.8	23.5	26.5	29.5	31.5	33.5
Sound pressure level	dB(A)	65	65	65	70	70	70
Cooling method		Water-cooled					
Control system	pcs	The South Korea SAMWON TEMI1500.TEMI2500 · TEMI2700					

## Rapid temperature change test chamber Камера быстрого изменения температуры



### Data sheet

Model	Unit	SM-KS-190-40-5	SM-KS-190-70-5	SM-KS-335-40-5	SM-KS-335-70-5	SM-KS-600-40-5	SM-KS-600-70-5	SM-KS-990-40-5	SM-KS-990-70-5	SM-KS-1540-40-5	SM-KS-1540-70-5
Volume	L	190		335		600		990		1540	
<b>Temperature Test Parameters</b>											
Temperature range	°C	-40/+180	-70/+180	-40/+181	-70/+181	-40/+182	-70/+182	-40/+183	-70/+183	-40/+184	-70/+184
Temperature fluctuation	°C	±0.1°C~±0.5°C									
Temperature uniformity	°C	±0.5°C~±2.0°C									
Heating/cooling rate	°C	7.0/8.0	7.5/7.5	6.5/6.8	6.8/6.7	6.0/6.5	6.0/6.0	6.1/6.7	6.1/6.0	6.0/6.3	6.0/5.0
<b>Climate test parameters</b>											
Temperature range	°C	+10~+95									
Humidity range	%r.h	10~98									
Dew point temperature	°C	3~94									
Humidity fluctuation	%r.h	±1.0~±3.0									
Temperature fluctuation	°C	±0.1~±0.3									
Temperature uniformity	°C	±0.5~±1.0									
The inner size	mm	580×450×750		580×765×750		800×800×950		1100×950×950		1100×1475×950	
The outside size	mm	870×1280×1775		870×1595×1775		1090×1660×1995		1390×1855×1995		1390×2380×1995	
Power supply		400V±10%,50HZ,3/N/PE									
Power	KW	8	10	8	10	11	17	23	26	23	26
Cooling mode		water cooling									
Chamber 10°C/min	Model	SM-KS-270-40-10	SM-KS-270-70-10	SM-KS-480-40-10	SM-KS-480-70-10	SM-KS-800-40-10	SM-KS-800-70-10	SM-KS-1300-40-10	SM-KS-1300-70-10		
Chamber 15°C/min	Model	SM-KS-270-40-15	SM-KS-270-70-15	SM-KS-480-40-15	SM-KS-480-70-15	SM-KS-800-40-15	SM-KS-800-70-15	SM-KS-1300-40-15	SM-KS-1300-70-15		
Volume	liter	270		480		800		1300			
<b>Temperature Test Parameters</b>											
Temperature range		-40/+180	-70/+180	-40/+180	-70/+180	-40/+180	-70/+180	-40/+180	-70/+180		
Temperature fluctuation	°C	±0.3~±0.8									
Temperature uniformity	°C	±0.5~±2.0									
Heating/cooling rate	°C/min	10.0/12.5	10.0/14.5	10.0/12.5	10.0/11.0	12.0/12.0	12.0/12.0	12.0/11.5	11.0/10.5		
heating/cooling rate	°C/min	16.0/16.0	17.0/18.0	16.0/18.0	17.0/15.0	16.0/18.0	16.0/15.5	16.0/17.0	16.0/14.5		
<b>Climate test parameters</b>											
Temperature range	°C	+10~+95									
Humidity range	%r.h	10~95									
Dew point temperature	°C	3~94									
Humidity fluctuation	%r.h	±1.0~±3.0									
Temperature fluctuation	°C	±0.1~±0.5									
Temperature uniformity	°C	±0.5~±1.0									
The inner size	mm	580×620×750		800×650×950		1100×800×920		1100×1300×920			
The outside size	mm	870×1980×1775		1090×2480×2025		1390×2675×2020		1390×3200×2020			
Power supply		400V±10%,50HZ,3/N/PE									
Power	KW	8/12	14/16	16/20	20/24	28/35	34/44	28/35	34/44		
Cooling mode		water cooling									

## Thermal shock test chamber камера термаудара



Model	Unit	SM-60-2P-A	SM-125-2P-A	SM-300-2P-A	SM-120-3P-A	SM-202-3P-A
Test volume	L	60	125	300	120	202
Test area	L	2	2	2	3	3
Temperature range of high temperature box	°C	+50/+220	+50/+220	+50/+220	+50/+220	+50/+220
Room temperature range	°C	-	-	-	-10/+90	-10/+90
Temperature range of low temperature box	°C	+80/-70	+80/-70	-75/+70	-75/+70	-75/+70
Temperature fluctuation	°C	±0.3~±1.0	±0.3~±1.0	±0.3~±1.0	±0.3~±1.0	±0.3~±1.0
Temperature uniformity	°C	±0.5~±2.0	±0.5~±2.0	±1.0~±2.0	±1.0~±2.0	±1.0~±2.0
Recovery time	Min	less than 5 minutes measured on the sample	less than 5 minutes measured on the sample	less than 5 minutes measured on the sample	Less than 10 minutes measured at the outlet	Less than 10 minutes measured at the outlet
Test Chamber internal dimensions	Wide)mm	380	470	770	470	650
	Deep)mm	430	650	650	650	670
	High)mm	370	410	610	400	460
Test Chamber external dimensions	Wide)mm	875	970	1290	960	1550
	Deep)mm	1970	2350	1800	2150	1770
	High)mm	1895 (2330)	1985 (2450)	2220 (2885)	2130 (2625)	1900
Unit and cabinet size (W*D*H)	mm	-	-	800×1850×1900	-	-
Maximum load	Kg	20	50	50	50	70
Sound pressure level	DB(A)	58	56	57	70	70
Meet international standards		American military standard		MIL STD 883 E,method 1010,7,intensity A,B,C,D,F		
		American military standard		MIL STD 810 E,method 503		
		American military standard		MIL STD 202F,method 107G		
		International Electrotechnical Commission standard		IEC 60 068-2-14.Test Na		
		British Standard		BS 2011		
		German Industrial Standard		DIN 40046.Test Na		
		American semiconductor industry standard		JESD22-A101-A		
		American military standard		MIL STD 883 C,method 1010,5,intensity A,B,C,D,G		
	American military standard		MIL STD 810 D,method 503.2.MILSTD202,method 107 D			
Power		400V±10%,50HZ,3/N/PE				
Rated power	KW	12.5	14.5	30	15.5	31
Cooling method		Air-cooled			Water-cooled	

## Temperature, humidity and vibration integrated test chamber климатическая камера температура-влажность-вибрация



### Data sheet

Model	Unit	4060-5	7060-5	4120-5	7120-5	4220-5	7220-5
SMA Series temperature		4060-10	7060-10	4120-10	7120-10	4220-10	7220-10
SMV Series ( humidity )		4060-15	7060-15	4120-15	7120-15	4220-15	7220-15
Test volume	L	600		1200		2200	
<b>Temperature test specification</b>							
Temperature range	°C	-40/+180	-70/+180	-40/+180	-70/+180	-40/+180	-70/+180
Temperature fluctuation	°C	±0.1~±0.8					
Temperature uniformity	°C	±0.5~±2.0					
Temperature rate	°C/min	5°C/min · 10°C/min · 15°C/min · 20°C/min · 25°C/min · 30°C/min · 35°C/min · 40°C/min ·					
Climate test specification		( SMV SMV series)					
Temperature range	°C	+10~+95					
Temperature fluctuation	°C	±0.1~±0.5					
Temperature fluctuation	°C	±0.5~±1.0					
Humidity range	°C/min	10~95 (98%,h. When used in conjunction with the Blind)					
Humidity fluctuation	°C/min	±1~±3					
Dew-point temperature	°C	+4to+94 ( C14 When used in conjunction with the Blind ) /+4to+59 ( When used with a vertical perforated plate ) /+4to+40 ( when used With horizontal hole bottom plate )					
The maximum size of the vertical perforated plate	mm	max.Φ710		max.Φ1000		max.Φ1280	
The maximum size of the bottom plate	mm	max.700×700		max.1000×1000		max.1200×1200	
The inner size (W*D*H)	mm	800×800×950		1100×1100×950		1400×1400×1100	
The outside size (W*D*H)	mm	1225×2890×2150		1525×3590×2150		1825×3950×2300	
Power supply		400V±10%,50HZ,3/N/PE					
Power	KW	11/16/20	14/20/24	21/24/30	24/26/32	26/35/54	34/44/65
Cooling mode		Water-cooled					

## High low temperature and low pressure test chamber

### Термобарокамера



Model		SM-VT-0770W	SM-VT-1070W	SM-VT-2470	
Inner volume (L)		720	1000	2370	
Performance	Temperature range	VT: -70°C~+160°C VH(ambient temperature+20) °C~+160°C			
	Pressure range	ordinary pressure ~0.5Kpa			
	Temperature fluctuation	≤1°C (ordinary pressure)			
	Temperature fluctuation	≤±2.0°C (ordinary pressure)			
	Temperature fluctuation	≤±2kpa (≥40kpa) , ≤±5% (2-40kpa) , ≤±0.1kpa (≤2kpa)			
	Temperature fluctuation	25°C ( ordinary temperature ) ~ +160°C			
	Temperature fluctuation	≤60min (ordinary pressure)			
	Cooling time	25°C~-65°C (only VT model)			
	Cooling time	≤60min (ordinary pressure)		≤90min (ordinary pressure)	
Reduce pressure time	ordinary pressure ~0.5Kpa (when the cabinet is dry)				
Quick relief (optional)		≤25min	≤30min	≤45min	
Inner size (mm)	W	800	1000	1300	
	H	900	1000	1300	
	D	1000	1000	1400	
	W	1290	1490	1790	
Outside size*4 (mm)	H	2065	2165	2465	
	D	2372	2370	2772	
	D	2372	2370	2772	
Adjustment of temperature and pressure		(BTPC)balance temperature pressure control mode			
Working temperature		+5~+35 °c			
Material	Outer covering	manganese steel (spray-paint),outer covering can withstand pressure. appearance color: GWS standard color			
	Inwall	SUS 304 stainless steel			
	Heat insulation	Special composite pressure vacuum insulation materials			
	Heater	inside air heated nickel chrome Strip heater, wall heater, stainless steel sheathed heater			
Regulator	Fan	Centrifugal fans			
	Refrigeration Compressor	Mechanical compressor			
	Refrigerant	R404a/R23			
	Cooling way	Water-cooled mechanical compressor			
Controller	Display	5.7 inches. 640 * 480 dots, TFT color LCD monitor			
	Operation mode	program running mode · setting running mode			
	Setting Mode	Chinese-English menu, touch panel input			
	Setting range	temperature:to adjust according to equipment temperature working range (upper limit+5°C · lower limit-5°C) pressure : 0-100kpa			
	Display resolution	temperature : 0.1°C ; time 0.1min pressure : 0.01kpa			
	Input	Themocouple, 4-20mA current			
	Communication Function(optional)	Interface	RS485/GPIB/Ethernet interface		
		Communication	STEN protocol: ASCLL instruction set, can be sent directly by the super terminal		
	Control mode	GWS Protocol: provides programming interface functions, RAS-2003 to be equipped with monitoring software (for XP / win7 system), can connect up to 16 devices at the same time, RS485 cable cumulative length up to 800 meters.			
	Curve recording function	Anti-integral saturation PID			
Water Supply	Cooling water	Having RAM with battery protection, set values and sampled values and the sampling time of the equipment can be saved, maximum recording time is 60 days (when the sampling period is 1.5min)			
Power supply		Water pressure: 0.32-0.45mpa, water temperature ≤30 °C			
Capacity (kw)		AC380(1±10%)V (50±0.5)HZ three-phase round wire + ground protection		VT:20, VH:18	
		VT:20, VH:10		VT:28, VH:18	

## Xenon lamp weather resistance test chamber

### ксеноновая камера



#### Data sheet

Model	SM-300XD	SM-800XD	SM-1200XD
Inner Dimension D×W×H mm	600×600×600	900×900×900	1000×1200×1000
Outer Dimension D×W×H mm	1450×1350×1650	1750×1650×1950	1850×1950×2050
Water cooled xenon lamp power	4.5KW		
Performance & Parameters	Temperature range	RT+10°C~90°C	
	Humidity range(Light)	10%~78%R.H	
	Humidity range(Dark)	10%~98%R.H	
	Rainfall duration	1 to 9999 hours and 59 minutes adjustable	
	Rainfall cycle	1 to 9999 hours and 59 minutes adjustable	
	Light source	290nm~400nm	
	Irradiance deviation	±0.1 W/m <sup>2</sup>	
	Irradiation intensity	290nm ~ 400nm nm when 60 W / m2 adjustable	
	Irradiometer	Meet testing requirements	
	Irradiance calibration function	Automatic calibration, and meet the requirements of the National Metrology Department	
Xenon lamp power	4.5KW (life: 2000 hours)		
Temperature and humidity control system	Accuracy range	Setting / accuracy: temperature 0.1, humidity, 1%R.H	
	Temperature and humidity sensor	Platinum resistance PT100Ω/MV	
	Heating system	The whole system independent, nickel chromium alloy electric heating type heater	
	Humidification system	External isolated, stainless steel shallow surface evaporative humidifier	
	Blackboard temperature	40~110°C	
	Water supply system	With automatic control by filter, humidification water. Cooling water loop xenon lamp	
	Temperature controller	Imported Waylen color touch screen and PLC control module Siemens Germany	
	Circulatory system	Low temperature and low noise air conditioning motor.	
	Outer box material	High quality carbon steel phosphating, electrostatic spray processing	
	Materials used	Inner box material	SUS304 stainless steel plate
Sample frame material		SUS304 high quality stainless steel bar	
Door frame heat insulation		High temperature aging silicone rubber door seal	
Safeguard	Leakage, short circuit, over temperature, water shortage, motor overheating, over current protection		
Power supply	Three phase and five wire system		



## UV weather resistance test chamber климатическая камера с УФ-облучением



### Data sheet

Model	SM-UV600-C	SM-UV800-C
Inner Dimension	W1100×H500mm	W1200×H600×D450mm
Application Area	Simulate sunlight, dew on materials and products cause harm test, widely used for weather-resistant properties of the material	
Standards	GB/T 16422.3 · GB/T5170.9	
Performance	Temperature range	Room temperature +10°C~+70°C
	Temperature fluctuation	±0.5°C
	Humidity Range	95%~100%RH
Outter Dimensions	500×1300×1480mm	
Ambient temperature of using	50°C ~ 35°C	
light source	lamp Purple and outside light of UV-A/B	
Light source wavelength	280~400nm	
Size of test shelf	150×75×1.5mm	
Distance between test sample and tube center	50mm±2mm	
Distance between tube and centre tube	70mm±2mm	
Material	Test Area	Advanced brushed stainless steel
	Outter Box	Advanced brushed stainless steel
Heating humidifier	Electric heating, thermal and steam humidification	
Material	Operation Interface	Digital smart touch key input (programmable)
	Operation mode	Program control / constant operation
	Setting range	According to temperature range
	Input	Blackboard thermometer PT 100 sensor
	Additional Function	Upper and lower alarm, alarm display, timer function
Standard configuration	28 pcs of stainless steel sample holder	
Safety Device	Leakage, overload protection, water shortage, over temperature protection, grounding protection	
Power supply	230V±10%,1/N,50HZ	
Power(kw)		

## Salt spraying test chamber камера соленого тумана



### Salt spray test chamber

Model	SM-Y-60D	SM-Y-90D	SM-Y-120D	SM-Y-160D
Test volume	108L	270L	480L	950L
Humidity range	Salt spray test ambient temperature+5°C~ +50°C		Aqua water test ambient temperature+5°C~ +45°C	
Temperature range	Relative humidity laboratory/saturation humidity			
Temperature fluctuation	±1°C			
Salt spray test air flow	2m3/h at 0°C and 1bar			
The exhaust air flow	7m3/h at 0°C and 1 bar			
Compressed air pressure	4-10bar			
Humidifier water pressure	"3-5bar Demineralized water			
Saline irrigation	15L	25L	40L	60L
Weight (without salt)	60kg	120kg	180Kg	220Kg
The inner size mm	600*450*400	900*600*500	1200*800*500	1600*1000*600
The outside size mm	1170*1100*720	1470*1250*820	1750*1350*950	2100*1400*1050
Power	0.9KW	1.3KW	2KW	2.6KW
Power supply	1/N/PE AC 230V 50/60HZ			

### Temperature, humidity and salt spray

Model	SM-F-90C	SM-F-120C	SM-F-160C	SM-F-200C
The interior size(mm)	900×600×500	1200×800×500	1600×1000×500	2000×1200×600
The exterior size(mm)	1410×880×1280	1900×1100×1400	2300×1300×1400	2700×1500×1500
Temperature range	-20°C、-10°C、RT~80°C			
Humidity range	20%~98%			
Analytical precision/uniformity of temperature and humidity	±0.1°C; ±0.1%R.H/±1.0°C; ±3.0%R.H.			
The control accuracy/fluctuation of temperature and humidity	±0.1°C; ±2.0%R.H/±0.5°C; ±2.0%R.H.			
The testing room temperature	(NSS ACSS)35°C±1°C/(CASS)50°C±1°C			
Pressure barrel temperature	(NSS ACSS)47°C±1°C/(CASS)63°C±1°C			
Salt water temperature	35°C±1°C 50°C±1°C			
Brine concentration	In sodium chloride solution concentration of 5% or 5% sodium chloride solution concentration per liter add 0.26 g of copper chloride (CuCl2 h20) 2)			
The compressed air pressure	1.00±0.01kgf/cm2			
Spray amount	1.0~2.0ml/80cm2/h ( Collect at least 6 hours, and take the average).			
PH	6.5~7.2 3.0~3.2			
Spray way	Continuous spray			
The power supply	230V±10%,1/N,50HZ			

## HAST accelerated aging test chamber камера старения(HAST)



Model	SM-PCT-250	SM-PCT-300	SM-PCT-400	SM-PCT-500
Internal size(W×H×D)mm	250×400	300×500	400×600	500×600
External size(W×H×D)mm	560×100×650	650×100×700	750×115×800	850×125×900
Humidity Range	100°C-135°C	100°C-135°C	100°C-135°C	100°C-135°C
Humidity Range	100%RH Saturated Steam	100%RH Saturated Steam	100%RH Saturated Steam	100%RH Saturated Steam
Pressure Range	A standard atmospheric pressure	A standard atmospheric pressure	A standard atmospheric pressure	A standard atmospheric pressure
Note	The required air pressure for special custom specifications is greater than 2kgf/cm3			

## High temperature aging test chamber камера старения(высокая температура)



Model	The size (W×H×Dmm)	outside size (W×H×Dmm)	volume	Temperature range	Temperature and humidity control precision	Heating up time	power
SM-G-80-DA	400*400*500	1050*700*1350	80L	25°C-200°C	±0.2°C ±2.5°C	25°C-100°C/6min	3.0kw
SM-G-150-DA	500*500*600	500*500*600	150L				4.0kw
SM-G-240-DA	500*600*750	500*600*750	240L				4.5kw
SM-G-480-DA	800*600*850	800*600*850	480L	25°C-300°C	±0.2°C ±2.5°C	25°C-100°C/6min	5.5kw
SM-G-80-DB	400*400*500	1050*700*1350	80L				3.5kw
SM-G-150-DB	500*500*600	500*500*600	150L				4.5kw
SM-G-240-DB	500*600*750	500*600*750	240L				5.5kw
SM-G-480-DB	800*600*850	800*600*850	480L				6.5kw

## Dust test chamber камера песка и пыли



Model	SM-SC-500C	SM-SC-800C	SM-SC-1000C	SM-SC-1500C	SM-SC-2600C	
Inner volume(L)	500	800	1000	1500	2600	
Technical features	Metal mesh standard spacing	50um				
	Wire diameter	75um				
	The amount of talc	2Kg/m <sup>2</sup> ~4kg/m <sup>2</sup>				
	Dusting mode	1、Dust free mode:The use of centrifuges to blow the dust tank top 1/5 of the height of its free precipitation 2、Blowing dust mode:Bottom pressure spray dust, three-block pressure adjustable				
Size of test area mm	D	800	900	1000	1000	1200
	W	800	900	1000	1000	1200
	H	800	1000	1000	1500	1800
Material	Test area	SUS 304# stainless steel				
	Shell	Cold-rolled plate rustproof spray treatment or SUS304stainless steel (optional)				
Control System	User interface	LCD color touch screen controller or touch-LCD Controller(optional)				
	Operation mode	Program running / constant type running				
	Input	PT-100 sensor				
Power supply	400V±10%,50HZ,3/N/PE					
Standard configuration	two test material frame ,one user manual, 1 dust sieve					

## Ozone aging test chamber ОЗОНовая испытательная камера



Model	SM-150CY
Testing room size(D×W×H)	500×500×600mm
Temperature Range	RT +10~+60°C
Temperature fluctuation	±0.5°C
Temperature deviation	±1.0°C
Temperature Resolution	0.1°C
Swing speed	1~30r/min adjustable
Drawing speed	1~30times/min adjustable
Drawing distance	1~150min adjustable
Product extension length	1~100mm adjustable
Ozone concentration	0~1500pphm(0~300 ppm (optional)(Set value can be adjusted)
Deviation of Ozone concentration	≤5%pphm
Air velocity	Air velocity can be realized 12-16mm/s or 600mm/s±100mm/s
Electric power	3.5KW

## Rain test chamber камера дождя



### Data sheet

Technical parameter		IPX1,IPX2	IPX3,IPX4	IPX5,IPX6
Waterproof Level		IPX1,IPX2	IPX3,IPX4	IPX5,IPX6
Work Temperature Range		RT	RT	RT
Nozzle Diameter		0.4mm	0.4mm	6.3mm, 12.5mm
Main Technical Parameters		Dropping water area and dropping height can be ordered according to the actual product size; Dropping water strength is 1.9~3.8 L/h, dropping water aperture is $\Phi 0.4$ mm, hole pitch is 25mm.	Pendulum pipe radius can be ordered according to product's size; if IPX4 test needs water spray sprinkler which should make explanation in ordering; Pendulum pipe radius 200, 400, 600, 800, 1000, 1200, 1400, 1600mm, can be arbitrary ordered; each drop nozzle spray amount is 0.07 L/min, arranging the angle from the center to the both sides each pendulum is 1 ~135 Degree which can be arbitrary set.	6.3mm nozzle spray amount is 12.5L/min, severe level is 75L/min, 12.5mm nozzle spray amount is 100 L/min, spray distance is 2.5~3m.
Model		SM-IPX9K		
Experiment space		800×800×800 (W×H×D) mm		
External dimensions		1700×2000×1300 (W×H×D) mm		
Power		400V±10%,50HZ,3/N/PE		
Testing Range	Spray angle	0、30、60、90 degree(4 position)		
	Flow	14 ~ 16L/min,		
	Water pressure	80 ~ 100 kg/cm <sup>2</sup>		
	Water temperature	80± 5°C		
Using materials	Distance	100 ~150mm Nozzle can be adjusted		
	Internal	SUS#304. Stainless steel plate		
	External	SUS#304+SECC+2660. The external SUS#304 stainless steel plate +SECC plate +2660 powder paint.		
	Pump motor	Germany imported high pressure pump, one group		
	Rotary motor	TUNGLEE TUNGLEE motor. Digital display tachometer, one group (including deceleration unit)		

# High low temperature explosion-proof test chamber взрывобезопасная камера тепло-холод



### Accessories

- Door lock (hand-tighten bolt)
- Pressure relief vent (φ100 mm)
- External input/output terminal
- Emergency stop pushbutton
- 3-colored light tower
- RS-485
- φ100 mm Cable port on the right side (with rubber plug) size 2:×1, size 3&4:×3
- Floor load capacity of 100 kg
- Shelf support (M5-tapped)
- Analysis certificate

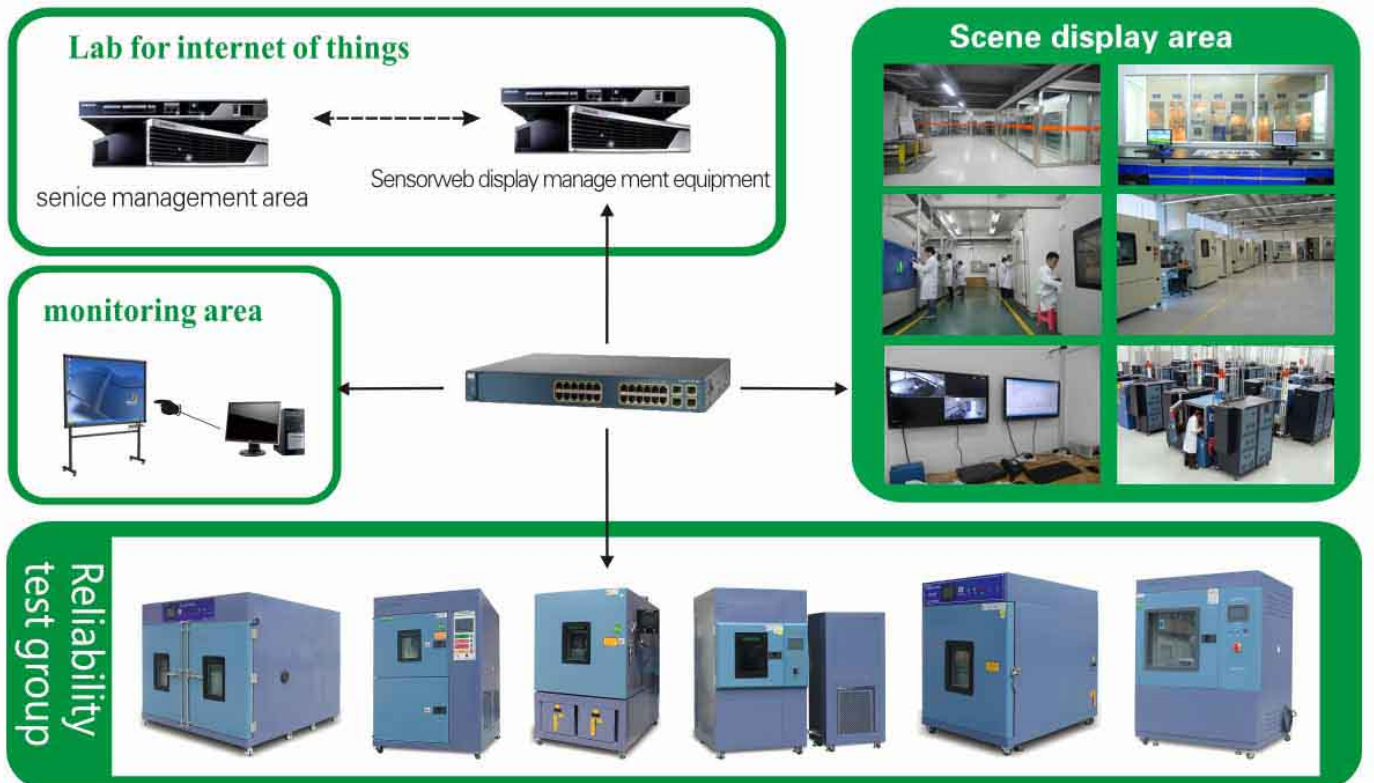
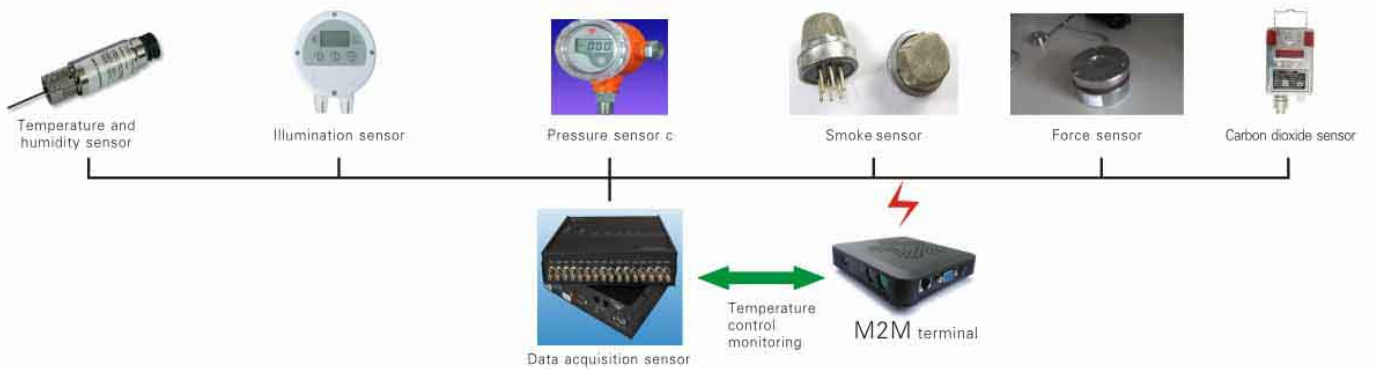
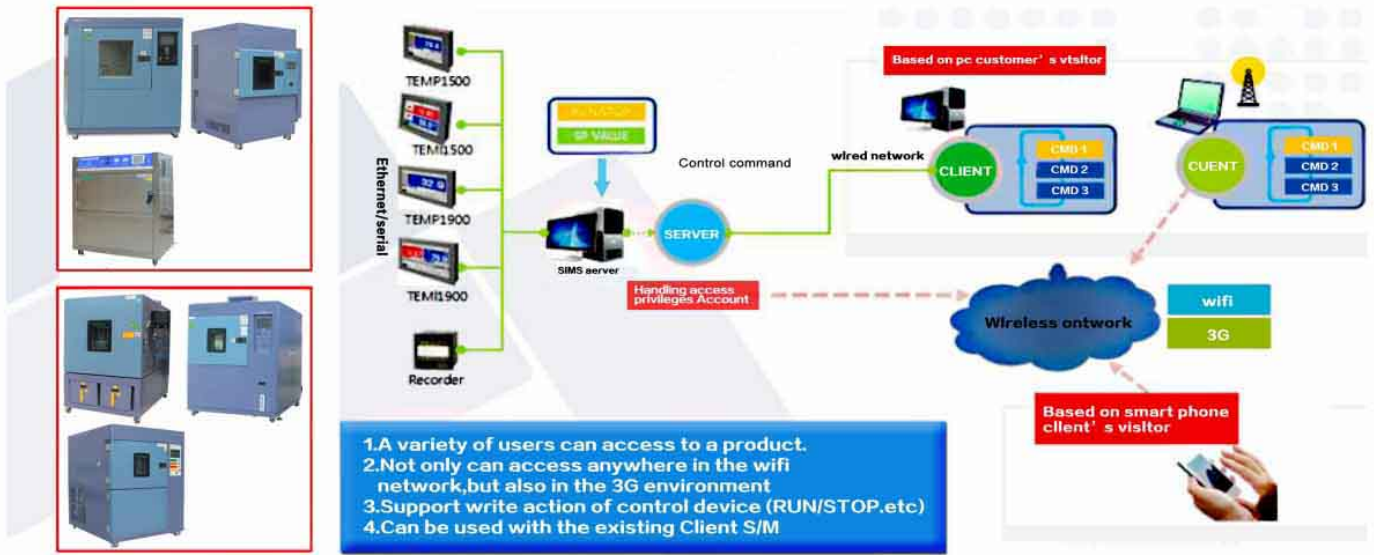
### Options

- 300×300 mm-pressure relief vent (replaces the standard vent)
- Automatic CO2 fire extinguisher (with cylinder)
- Automatic N2 fire extinguisher (jet circuit, starting valve)
- Smoke detector (with suction circuit)
- Thermal detector (specifications of ermocouple, analog setter)
- H2 detector (suction circuit, detector, indicator)
- CO detector (suction circuit, detector, indicator)
- Organic solvent detector (suction circuit, detector, indicator)
- Forced air supply/exhaust damper
- Additional cable port (φ50/φ100 mm)
- Heavy-duty shelf & shelf bracket

### Data sheet

Model	Unit	SMC-64-CC-DF	SMC-80-CC-DF	SMC-150-CC-DF	SMC-225-CC-DF	SMC-408-CC-DF	SMC-800-CC-DF	SMC-1000-CC-DF	SMC-1500-CC-DF
Temperature range	°C	-75°C~+180°C(A:0°C;B:-20°C;C-40°C;D-75°C)							
Humidity range	%RH	10~98							
Dew point temperature	°C	+10~+95							
Dew point temperature range	°C	+4 (-3°C) ~+94							
Temperature fluctuation	%rh	±1.0~±3.0							
Temperature changes	°C	±0.1~±0.5, ±0.5~±2.0 fluctuation.....Evenness							
Heating rate	°C/min	3.0°C~+5.0°C (optional 3°C/min, 5°C/min, 7°C/min, 10°C/min, 15°C/min)							
Cooling rate	°C/min	-1.0°C~+2.0°C (optional 3°C/min, 5°C/min, 7°C/min, 10°C/min, 15°C/min)							
Highest thermal compensation	W	200W	400W	400W	400W	500W	500W	600W	600W
The inner size (mm)	Wide	400	400	500	500	800	1000	1000	1200
	Deep	400	400	500	600	600	800	1000	1000
	Gigh	400	500	600	750	850	1000	1000	1250
The outside size (mm)	Wide	680	700	800	800	1100	1300	1300	1500
	Deep	900	1220	1320	1420	1420	1620	1820	2300
	High	625	1450	1550	1700	1800	1980	1980	1600
Power supply		230V±10%,1/N,50HZ				400V±10%, 3/N/PE,50HZ			
Power	Kw	4.8	5.8	6.5	8.5	8.9	11.6	13.5	15.5
SPL	dB(A)	50	52	54	55	56	60	60	65
Weight	kg	220	285	385	450	500	780	850	1150
Cooling mode		Air-cooled							

**Remote control of mobile APP(optinal)**



**Please view the English website for more products.....**



High low temperature test chamber  
климатическая камера тепло-холод



Temperature and humidity testing chamber  
климатическая камера тепло-холод-влага



Landing type temperature and humidity testing chamber  
напольная камера тепло-холод-влага



Rapid temperature change test chamber  
Камера быстрого изменения температуры



Xenon lamp weather resistance test chamber  
ксеноновая камера



Thermal shock test chamber  
камера термаудара



Temperature, humidity and vibration integrated test chamber  
климатическая камера температура-влажность-вибрация



Dust test chamber  
камера песка и пыли



High low temperature explosion-proof test chamber  
взрывобезопасная камера тепло-холод



UV weather resistance test chamber  
климатическая камера с УФ-облучением



Salt spraying test chamber  
камера соленого тумана



High low temperature and low pressure test chamber  
Термобарокамера

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