



SPECIFICATION & CERTIFICATION

Recommended by



PORTABLE ELECTRONICS, TOOLS AND ACCESSORIES CHARGING & DISINFECTION

CONTENTS

Specification Sheet VR12	3
Specification Sheet VR20	4
Specification Sheet VR30	5
EUROFINS Test Report VR12	6
EUROFINS Test Report VR20	7
EUROFINS Test Report VR30	8
Sterilization Efficacy Evaluation Test	9
Certificate of Compliance	14
CE - RoHS Certificate	15
FAQs	16

SPECIFICATION SHEET

Small VR12

Model	Small UVC Cabinet	Charging Pr
Dimensions (LxWxH)	750 x 400 x 860mm	Power Syste
Charging Devices	Portable electronics includes laptop, tablets, VR Headsets	Rated Powe
Shelf Sizes	W: 600mm x D: 250mm x H: 200mm	UVC Disinfe
Doors	1x Double sided doors (front)	Power of UV
Max. Capacity: Tablets (on vertical racks)	30	Time-Setting
Max Capacity: Laptop (13inch)	6	Cooling and
Max Capacity: VR Headsets	12	Casters
Size of Unit Storage Slot (LxWxH)	250 x 150 x 200mm	Mobility
Shelf Movement Range	Top and middle shelf can be moved up/down by 4cm	Security
Charging Port	USB charging ports	Warranty

Charging Protection Leakage and short circuit protection module, over-charging protection Power System INPUT:AC100-240V 50/60HZ (country-specific standards) Rated Power 200W UVC Disinfection YES (254nm wavelength, low pressure UVC lamps) Power of UVC Lamps 8W, one lamp for each layer Time-Setting Function YES Cooling and Ventilation YES Casters 4 universal casters, two with locking functions Mobility One-handle with ergonomic design and property chassis Security One-handle with ergonomic design and property chassis One year warranty (cords and plugs not covered)		
Power System (country-specific standards) Rated Power 200W UVC Disinfection YES (254nm wavelength, low pressure UVC lamps) 8W, one lamp for each layer Time-Setting Function YES Cooling and Ventilation YES Casters 4 universal casters, two with locking functions Mobility One-handle with ergonomic design and property chassis 3 point mechanism with locking in doors, separate locking on top IT area Warranty One year warranty (cords	Charging Protection	protection module, over-
UVC Disinfection YES (254nm wavelength, low pressure UVC lamps) Power of UVC Lamps 8W, one lamp for each layer Time-Setting Function YES Cooling and Ventilation YES Casters 4 universal casters, two with locking functions Mobility One-handle with ergonomic design and property chassis 3 point mechanism with locking in doors, separate locking on top IT area Warranty One year warranty (cords	Power System	
Power of UVC Lamps 8W, one lamp for each layer Time-Setting Function YES Cooling and Ventilation YES 4 universal casters, two with locking functions Mobility One-handle with ergonomic design and property chassis 3 point mechanism with locking in doors, separate locking on top IT area Warranty One year warranty (cords	Rated Power	200W
Time-Setting Function YES Cooling and Ventilation YES Casters 4 universal casters, two with locking functions Mobility One-handle with ergonomic design and property chassis 3 point mechanism with locking in doors, separate locking on top IT area One year warranty (cords	UVC Disinfection	` ,
Cooling and Ventilation YES Casters 4 universal casters, two with locking functions Mobility One-handle with ergonomic design and property chassis 3 point mechanism with locking in doors, separate locking on top IT area Warranty One year warranty (cords	Power of UVC Lamps	8W, one lamp for each layer
Casters 4 universal casters, two with locking functions Mobility One-handle with ergonomic design and property chassis 3 point mechanism with locking in doors, separate locking on top IT area Warranty One year warranty (cords	Time-Setting Function	YES
Casters locking functions	Cooling and Ventilation	YES
Security design and property chassis 3 point mechanism with locking in doors, separate locking on top IT area One year warranty (cords	Casters	•
Security locking in doors, separate locking on top IT area One year warranty (cords	Mobility	•
Warranty	Security	locking in doors, separate
	Warranty	,



SPECIFICATION SHEET

Medium VR20

Model	Medium UVC Cabinet	Cha
Dimensions (LxWxH)	750 x 600 x 860mm	Pow
Charging Devices	Portable electronics including laptops, tablets, VR headsets	Rate
Shelf Sizes	W: 600, D: 550, H:200mm	UVC
Doors	2x Double sided doors (front and back)	Pow
Max. Capacity: Tablets (on vertical racks)	60	Time
Max Capacity: Laptop (13inch)	12	Coo
Max Capacity: VR Headsets	20	Cast
Size of Unit Storage Slot (LxWxH)	250x150x200mm	Mob
Shelf Movement Range	Top and middle shelf can be moved up/down by 4cm	Secu
Charging Port	USB charging ports	War

Charging Protection Leakage and short circuit protection module, over-charging protection Power System INPUT:AC100-240V 50/60HZ (country-specific standards) Rated Power 250W UVC Disinfection YES (254nm wavelength, low pressure UVC lamps) Power of UVC Lamps 8W, one lamp for each layer Time-Setting Function YES Cooling and Ventilation YES Casters 4 universal casters, two with locking functions Mobility One-handle with ergonomic design and property chassis Security One-handle with ergonomic design and property chassis One year warranty (cords and plugs not covered)		
Power System (country-specific standards) Rated Power 250W UVC Disinfection YES (254nm wavelength, low pressure UVC lamps) Power of UVC Lamps 8W, one lamp for each layer Time-Setting Function YES Cooling and Ventilation YES Casters 4 universal casters, two with locking functions Mobility One-handle with ergonomic design and property chassis 3 point mechanism with locking in doors, separate locking on top IT area Warranty One year warranty (cords	Charging Protection	protection module, over-
UVC Disinfection YES (254nm wavelength, low pressure UVC lamps) 8W, one lamp for each layer Time-Setting Function YES Cooling and Ventilation YES Casters 4 universal casters, two with locking functions Mobility One-handle with ergonomic design and property chassis 3 point mechanism with locking in doors, separate locking on top IT area Warranty One year warranty (cords	Power System	
Power of UVC Lamps 8W, one lamp for each layer Time-Setting Function YES Cooling and Ventilation YES 4 universal casters, two with locking functions Mobility One-handle with ergonomic design and property chassis 3 point mechanism with locking in doors, separate locking on top IT area Warranty One year warranty (cords	Rated Power	250W
Time-Setting Function YES Cooling and Ventilation YES Casters 4 universal casters, two with locking functions Mobility One-handle with ergonomic design and property chassis 3 point mechanism with locking in doors, separate locking on top IT area One year warranty (cords	UVC Disinfection	` ,
Cooling and Ventilation YES Casters 4 universal casters, two with locking functions Mobility One-handle with ergonomic design and property chassis 3 point mechanism with locking in doors, separate locking on top IT area Warranty One year warranty (cords	Power of UVC Lamps	8W, one lamp for each layer
Casters 4 universal casters, two with locking functions Mobility One-handle with ergonomic design and property chassis 3 point mechanism with locking in doors, separate locking on top IT area One year warranty (cords	Time-Setting Function	YES
Mobility One-handle with ergonomic design and property chassis 3 point mechanism with locking in doors, separate locking on top IT area One year warranty (cords	Cooling and Ventilation	YES
Security design and property chassis 3 point mechanism with locking in doors, separate locking on top IT area One year warranty (cords	Casters	•
Security locking in doors, separate locking on top IT area One year warranty (cords	Mobility	
Warranty	Security	locking in doors, separate
	Warranty	, , , , , , , , , , , , , , , , , , , ,



SPECIFICATION SHEET

Large VR230

Model	Model Large UVC Cabinet			
Dimensions (LxWxH)	900 x 600 x 860mm	Power Sys		
Charging Devices	Portable electronics includes laptop, tablets, VR Headsets	Rated Pov		
Shelf Sizes	W: 750, D: 550, H:200mm	UVC Disin		
Doors	2x Double sided doors (front and back)	Power of		
Max. Capacity: Tablets (on vertical racks)	75	Time-Sett		
Max Capacity: Laptop (13inch)	18	Cooling a		
Max Capacity: VR Headsets	30	Casters		
Size of Unit Storage Slot (LxWxH)	250x150x200mm	Mobility		
Shelf Movement Range	Top and middle shelf can be moved up/down by 4cm	Security		
Charging Port	USB charging ports	Warranty		

Charging Protection Leakage and short circuit protection module, over-charging protection Power System INPUT:AC100-240V 50/60HZ (country-specific standards) Rated Power 330W UVC Disinfection YES (254nm wavelength, low pressure UVC lamps) Power of UVC Lamps 8W, one lamp for each layer Time-Setting Function YES Cooling and Ventilation YES Casters 4 universal casters, two with locking functions Mobility One-handle with ergonomic design and property chassis Security One-handle with ergonomic design and property chassis One year warranty (cords and plugs not covered)		
Power System (country-specific standards) Rated Power 330W UVC Disinfection YES (254nm wavelength, low pressure UVC lamps) Power of UVC Lamps 8W, one lamp for each layer Time-Setting Function YES Cooling and Ventilation YES Casters 4 universal casters, two with locking functions Mobility One-handle with ergonomic design and property chassis 3 point mechanism with locking in doors, separate locking on top IT area Warranty One year warranty (cords	Charging Protection	protection module, over-
UVC Disinfection YES (254nm wavelength, low pressure UVC lamps) 8W, one lamp for each layer Time-Setting Function YES Cooling and Ventilation YES Casters 4 universal casters, two with locking functions Mobility One-handle with ergonomic design and property chassis 3 point mechanism with locking in doors, separate locking on top IT area Warranty One year warranty (cords	Power System	
Power of UVC Lamps 8W, one lamp for each layer Time-Setting Function YES Cooling and Ventilation YES 4 universal casters, two with locking functions Mobility One-handle with ergonomic design and property chassis 3 point mechanism with locking in doors, separate locking on top IT area Warranty One year warranty (cords	Rated Power	330W
Time-Setting Function YES Cooling and Ventilation YES Casters 4 universal casters, two with locking functions Mobility One-handle with ergonomic design and property chassis 3 point mechanism with locking in doors, separate locking on top IT area One year warranty (cords	UVC Disinfection	` ,
Cooling and Ventilation YES Casters 4 universal casters, two with locking functions Mobility One-handle with ergonomic design and property chassis 3 point mechanism with locking in doors, separate locking on top IT area Warranty One year warranty (cords	Power of UVC Lamps	8W, one lamp for each layer
Casters 4 universal casters, two with locking functions Mobility One-handle with ergonomic design and property chassis 3 point mechanism with locking in doors, separate locking on top IT area One year warranty (cords	Time-Setting Function	YES
Mobility One-handle with ergonomic design and property chassis 3 point mechanism with locking in doors, separate locking on top IT area One year warranty (cords	Cooling and Ventilation	YES
Security design and property chassis 3 point mechanism with locking in doors, separate locking on top IT area One year warranty (cords	Casters	•
Security locking in doors, separate locking on top IT area One year warranty (cords	Mobility	
Warranty	Security	locking in doors, separate
	Warranty	, , , , , , , , , , , , , , , , , , , ,

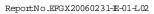






	EC 62471		
C lause	Requirem ent+ Test	Result-Remark	Verdict

Table 61	Em ission lim its for	its for risk groups of continuous wave lamps							P	
		Em is sion M easurem ent								
:	Risk	Action spectrum	Sym bol	Units	Ex	em pt	Low	risk	M od	nisk
		-			Lim it	Result	Lim it	Result	Lim it	Result
Actinic UV		S _{UV} (λ)	Es	W•m ⁻²	0,001	3,934E04	0,003	-	0,03	-
NearUV			E _{UVA}	W•m⁻²	10	6,114E03	33	-	100	-
Blue l g ht		Β(λ)	L_{B}	W•m ⁻² •sr ⁻¹	100	1,418E01	10000	-	4000000	-
Blue light, sm all	source	Β(λ)	ΕB	W•m⁻²	1,0	=	1,0	-	400	-
Retinal Inem al		R(λ)	L_R	W•m ⁻² •sr ⁻¹	28000/α	3,003E+00	28000/α	-	71000/α	-
Retinal hermal, ulus**	weak visualstim -	R(λ)	$L_{\mathbb{R}}$	W•m ⁻² •sr ⁻¹	6000/α	2,764E02	6000/α	-	6000/α	-
IR radiation, eye	e		E _R	W•m⁻²	100	6,342E02	570	-	3200	-
	te defined as one w Luation ofnon-GIS s		an. Averaging fi	eld of view at 1	0000 s is 0,1 ra	ndian.				
ModelName	VR12	2								
Lamp Classificati	on	 ☑ Except (Sup ☐ Risk Group 1 (Low Risk) ☐ Risk Group 2 (Moderate-Risk) ☐ Risk Group 3 (High-Risk) 								
Measuremento	nditions Theo	listance between	lighting surface o	f he lightandd	etectorwas200	mm during the tes	t,andthedoorisch	osed doming bleme	asurem ent.	





	EC 62471		
C huse	Requirement+Test	Result-Remark	Verdict

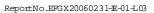
Table 6.1	Em ission lim its f	s forrisk groups of continuous wave lamps								
			Em ission M easurem ent							
R	lisk	Action spectrum	Sym bol	Units	Ex	zem pt	Low	risk	Мос	l risk
		4 332			Lim it	Result	Lim it	Result	Lim it	Result
Actinic UV		Sυν(λ)	Es	W•m⁻²	0,001	8,438E04	0,003	1	0,03	-
NearUV			EUVA	W•m⁻²	10	9,081E03	33	1	100	-
Blue l g iht		Β(λ)	L_{B}	W•m ⁻² •sr ⁻¹	100	1 A 5 2E+00	10000	1	4000000	1
Blue lgiht,sm alls	ource	Β(λ)	Ев	W•m⁻²	10	=	1,0	1	400	-
Retinal herm al		R(λ)	L_R	W•m ⁻² •sr ⁻¹	28000/α	7,872E+01	28000/α	-	71000/α	-
Retinal hermal,w	eakvisualstim -	R(A)	$L_{\mathbb{R}}$	W•m ⁻² •sr ⁻¹	6000/α	1,065E+00	6000/α	-	6000/α	-
IR madiation, eye			ER	W•m⁻²	100	1,142E01	570	=	3200	-
	** hvolves evaluation of non-GLS source									
ModelName	VR.	20								
Lamp Classificatio	on	 ☑ Except (Strup ☐ Risk Group 1 (Low Risk) ☐ Risk Group 2 (Moderate Risk) ☐ Risk Group 3 (High-Risk) 								
Meagarement con	ditions the	distance hetween	lighting gurfage o	of he light and d	etectorwas 200	Imm during the tes	t and the door is ch	amed during heme	agurem ent	



	EC 62471		
C huse	Requirem ent+ Test	Result-Remark	Verdict

Table 5.4	Sum m ary of the ELs for the surface of the skin or comea (ir not innoce based values)							
Hazard Name	Re-levant equation	Wavelength Exposure range duration sec		Lim iting aperture rad (deg)	EL in term sofcon- stant miadiance W •m -2			
Actinic UV skin & eye	$E_{S} = \sum E_{\lambda} \cdot S(\lambda) \cdot \Delta \lambda$	200 — 400	< 300 00	1 # (80)	30/t			
Eye UV-A	$E_{UVA} = \sum E_{\lambda} \cdot \Delta \lambda$	315 – 400	≤1000 >1000	1,4 (80)	10000/t 10			
Blue-light sm al kource	$\mathbb{E}_{B} = \sum E_{\lambda} \bullet B(\lambda) \bullet \Delta \lambda$	300 – 700	≤100 >100	< 0,011	100/t 1,0			
Eye H	$E_{\mathbb{R}} = \sum E_{\lambda} \cdot \Delta \lambda$	780 – 3000	≤1000 >1000	1,4 (80)	18000/t ^{0,75}			
Skin Inemal	$E_H = \sum E_{\lambda} \cdot \Delta \lambda$	380 - 3000	< 10	2π sr	20000/t ^{0,75}			

Table 5.5	Sum m ary of the ELs for the retina (radiance based values)						-
Hazard Name		Relevant equation	W avelength range nm	Exposure duration sec	Field ofview radians	EL in term constantra W •m ⁻²	diance
				025 - 10	0,011•√(t/10)	0,011•√(t/10) 10 [€]	
D1 15.b+		$\mathbb{L}_{B} = \sum L_{\lambda} \cdot B(\lambda) \cdot \Delta \lambda$	300 – 700	10-100	0ρ11	10 ⁶	/t
Blue light				100-10000	0,0011•√t	10 ⁶	/t
				≥ 10000	0,1	10	0
Retinal therm al			380 – 1400	< 0,25	0,0017	50000/(α•t ^{0,25})
			380 - 1400	025 - 10	0,011•√(t/10)	50000/(α•t ^{0,25})
Retinal them al (weak visual stin ulus)		$L_{\mathbb{R}} = \sum L_{\lambda} \cdot R(\lambda) \cdot \Delta \lambda$	780 —1400	> 10	0,011	6000)/a





	I€C 62471		
C huse	Requirem ent+ Test	Result-Remark	Verdict

Table 6.1	Em ission lim its	its for risk groups of continuous wave lamps								
					Em ission M easurem ent					
	Risk	Action spectrum	Sym bol	Units	Exem pt		Low risk		M od risk	
				Lin it	Result	Lim it	Result	Lin it	Result	
Actinic UV		S _{UV} (λ)	Es	W•m⁻²	0,001	6,741E04	0,003	-	0,03	-
NearUV			EUVA	W•m⁻²	10	7,802E03	33	-	100	-
Blue lġht		Β(λ)	L _B	W•m ⁻² •sr ⁻¹	100	1,440E01	10000	-	4000000	-
Blue lgiht,sm all	source	Β(λ)	ΕB	W•m⁻²	1,0	-	1,0	-	400	-
Retinal hem al		R(λ)	L_R	W•m⁻²•sr⁻¹	28000/α	6,135E+01	28000/α	-	71000/α	-
Retinal hermal, ulus**	weak visualstim -	R(λ)	L_R	W•m ⁻² •sr ⁻¹	6000/α	1,453E02	6000/α	-	6000/α	-
IR radiation, eye			E _R	W•m⁻²	100	4,181E02	570	-	3200	-
* Small source defined as one with a < 0,011 radian. Averaging field of view at 10000 s is 0,1 radian. ** Involvesevaluation of non-GLS source a=0.0840rad										
M odelNam e	v	R30								
Lamp Classificat	ion	Except Coup Risk Group 1 (Low Risk) Risk Group 2 (Moderate Risk) Risk Group 3 (High Risk)								
Measuremento	onditions T	he distance between lighting surface of hie light and detector was 200mm during the test, and the door is closed during them easurement.								









广州市微生物研究所

GUANG ZHOU INSTITUTE OF MICROBIOLOGY

检测报告 TEST REPORT

Report Number

KJ20202220(A)

Name of Sample

Charging Cart

Applicant

Chengdu Haix Technology Co., Ltd.







GUANG ZHOU INSTITUTE OF MICROBIOLOGY TEST REPORT

Date Received: Jun. 02, 2020 Date Analyzed: Jun. 03, 2020

	A	Date Ana	lyzed: Jun. 03, 2020
Name of Sample	Charging Cart	Source of Sample	Delivery
Applicant	Chengdu Haix Technology Co., Ltd.	Client	Li Bingqing
Manufacturer	Chengdu Haix Technology Co., Ltd.	Brand	UV hygienics
Type and Specification	VR Series	Quantity of Sample	1PC
Date of Production	2020.05.08	State of Sample	Machine
Batch Number	HNS20200508	Packing of Sample	In box
Sample Picture			· · · · · · · · · · · · · · · · · · ·
Standard and Methods	<technical disinfection="" efficacy="" equipment="" evaluation<="" for="" p="" standard="" sterilization=""></technical>		
	oquipment sterment of the contract of the cont		ion and sterilizatio
Items of Analysis	Germicidal Effect (Staphylococcus aureu	13	

To be continued







GUANG ZHOU INSTITUTE OF MICROBIOLOGY

TEST REPORT

Date Received: Jun. 02, 2020 Date Analyzed: Jun. 03, 2020

Sterilization and Sterilization Equipment Sterilization Efficacy Evaluation Test

- 1. Test Bacteria: Staphylococcus aureus ATCC 6538, Escherichia coli 8099
- 2. Culture Media: NA
- 3. Carrier: Cloth piece (10mm ×10mm)
- 4. Test Procedure
 - 1) Prepare bacterial tablets according to the method shown in <Technical Standard For Disinfection>2002-2.1.1.2 and 2.1.1.9. The recovered bacterial count of each bacterial tablet is 5×10⁵ cfu/ piece ~ 5×10⁶ cfu/ piece.
 - 2) The prepared bacteriums were placed at different positions in the charging cabinet to start the machine and sterilized for 5min and 30min respectively. Immediately after the action, put the bacterial tablets into a sterile test tube containing 5.0 mL PBS, and conduct live bacterial culture count.
 - 3) For the positive control group, the same batch of bacterial tablets used in the test were used to conduct live bacterial culture count.
 - 4) The negative control group was cultured with the same batch of medium or PBS inoculation medium to observe the sterile growth.
 - 5) Repeat the test for 3 times.









GUANG ZHOU INSTITUTE OF MICROBIOLOGY TEST REPORT

Date Received: Jun. 02, 2020 Date Analyzed: Jun. 03, 2020

-	·		
5.	Oct	resul	te.
0.	1030	LCSU	us.

Test Bacteria	Test Time (min)	Positive Control Group (cfu/piece)	Placed	The Sample Group (cfu/ piece)	*Killing Rate (%)	Killing Log Value
		1.15×10 ⁶ 1.31×10 ⁶ 1.39×10 ⁶	The upper left	<5	>99.99	>3.00
			The upper right	<5	>99.99	>3.00
	-		The middle left	<5	>99.99	>3.00
	5		The middle right	<5	>99.99	>3.00
)		The lower left	<5	>99.99	>3.00
Staphylococcus			The lower right	<5	>99.99	>3.00
aureus	160	1.11×10 ⁶	The upper left	<5	>99.99	>3.00
			The upper right	<5	>99.99	>3.00
	20	1.23×10 ⁶	The middle left	<5	>99.99	>3.00
	30		The middle right	<5	>99.99	>3.00
		1.30×10 ⁶	The lower left	<5	>99.99	>3.00
			The lower right	<5	>99.99	>3.00
,	C.	1.25×10 ⁶	The upper left	<5	>99.99	>3.00
			The upper right	<5	>99.99	>3.00
			The middle left	<5	>99.99	>3.00
	5	1.40×10 ⁶	The middle right	<5	>99.99	>3.00
	10	1.16106	The lower left	<5	>99.99	>3.00
Escherichia		1.16×10^6	The lower right	<5	>99.99	>3.00
coli		1.08×10 ⁶	The upper left	<5	>99.99	>3.00
			The upper right	<5	>99.99	>3.00
	20	1.15×10 ⁶	The middle left	<5	>99.99	>3.00
	30		The middle right	<5	>99.99	>3.00
	W.		The lower left	<5	>99.99	>3.00
			The lower right	<5	>99.99	>3.00

Note: 1) The negative control group was sterile growth.

2) Killing Rate (%)= Positive Control Group (cfu / piece) - The Sample Group (cfu / piece)

Positive Control Group(cfu/piece)

End of report





Date Reported



Certificate of Compliance

No. 00160325, CHT0011

Test Reports no. DEU(16)-03-X1001S, DEU[16]-03-X1001E

Certificate's

Holder:

Chengdu Haixin Technology Co., Ltd.

2529 Xiyuan Avenue, South District, Chenadu Modern Industrial Harbar, Pi County, Chengdu,

China

Certification ECM

Mark:



Product:

Model(s):

Multi-function Power manager/Power

management/Power manage/APM system HX-6002(PM-02), HX-6001(PM-01), HX-6001A,

HX-6003(PM-03), PM-S, PM-I, PM-C

Verification to:

Standard:

EN 60950-

1:2006+A11:2009+A1:2010+A12:2011+A2:2013,

EN 55024:1998+A1:2001+A2:2003,

EN 55022:2006+A1:2007,

EN 61000-3-2:2000+A2:2005+A1:2009+A2:2009,

EN 61000-3-3:1995+A1:2001+A2:2005

related to CE Directive(s): 2014/35/EU (Low Voltage)

2014/30/EU (Electromagnetic Compatibility)

Remark: The product(s) has been verified on a voluntary basis. The product(s) satisfies the requirements of The Certification Mark of ECM, in reference to the above listed Standard(s). The above Compliance Mark can be affixed on the product(s) accordingly to the ECM regulation about its release and its use. The regulation can be found at www.entecerma.it. This Certificate of Compliance can be checked for validity at www.entecerma.it

This verification doesn't imply assessment at the production of the product(s).

Additional information, clarification about the €€ Marking:



We affest that a TCF for the CE Marking process is in place. Whereas the Manufacturer is Responsible to start the C€ Marking Certification Procedure and to perform all the necessary activities, as required by the Directive before placing the C€ Mark on the product(s).

Date of issue 25 March 2016

Expiry date 24 March 2021

Deputy Manager Viola Mile

Chief Manager Tim Mahar

Ente Certificazione Macchine Srl

743 - Loc. Castello di Serravalle - 40053 Valsamoggia (🕿 +39 051 6705141 = +39 051 6705156 🖂 Info@entecerma.lt 🐔 www.entecerma.lt



Certificate of Compliance

Certificate Number: BSTDG200513822701CC

Applicant : ZHONGSHAN SHENGSHI LIGHTING TECHNOLOGY CO.,LTD

Backseat No.16 Huaguang Chaohua Road, Guzhen town, zhangshan

City, Guangdong Province, P.R.China

Manufacturer : ZHONGSHAN SHENGSHI LIGHTING TECHNOLOGY CO.,LTD

Backseat No.16 Huaguang Chaohua Road, Guzhen town, zhangshan

City,, Guangdong Province, P.R.China

Product Name : T8 UV LAMP

Main Test Model : SS-T8-UV-1199,AC110-250V,50/60Hz

Additional Model : SS-T8-UV-331,SS-T8-UV-436,SS-T8-UV-589,SS-T8-UV-894,

AC110-250V,50/60Hz

Test Standard : IEC 62321-4:2013+AMD1:2017, IEC 62321-5:2013,

IEC 62321-6:2015, IEC 62321-7-1:2015, IEC 62321-7-2:2017, IEC 62321-8:2017

As shown in the : I

BSTDG200513822701CR

BEST SERVICE OF TESTING

The EUT described above has been tested by us and found in compliance with the council RoHS 2 Directive 2011/65/EU Annex II (EU) 2015/863 as last amended by Directive (EU) 2017/2102. This certificate is only valid in conjunction with the test report.



RoHS

Test Capproved Signatory

May 21, 2020

Dongguan BST Testing Co., Ltd

Add: A1201-1204 Xinsanqi of Dongbao Road, Dongcheng District, Dongguan, Guangdong, China

Certificate Search: http://www.bst-lab.com, Tel: 400-8829628, 800-9990305, E-mail: christina@bst-lab.com



Find below answers to the most common asked questions.

How big is the cabinet?

VR12 Cabinet - D400mm W750mm H770mm VR20 Cabinet - D600mm W750mm H770mm VR30 Cabinet - D600mm W900mm H770mm

Does it prevent the spread of Covid 19?

It is scientifically proven that UVGI kills all the bacteria, spores, viruses, protozoans, moulds and yeasts. The level of UV irradiance in our cabinets will kill 99.9% of Poliovirus 1, SARS, H-CoV 229E, H-CoV OC43, H-CoV 229E, Influenza A (H1N1), Covid 19 in under one minute of exposure (*ref.: M. Buonanno, D. Welch, I. Shuryak, D.J. Brenner; DOI: 10.21203/ rs.3.rs -25728/v1), (*ref.: Tree et al. 2005), (*ref.: CDC, 2020). The longer the exposure, the higher log reduction is achieved.

Can it cause radiation exposure?

Our cabinets are designed the way that no radiation will escape. We can back this up with EIC 62471 Photobiological Safety certificate; we are in the Exempt group - the highest safety standard. Additionally all devices are equipped with a door safety switch preventing accidental light exposure (in case if the doors are opened during sanitization cycle).

Is it safe?

It is completely safe for the users, and the public. All the devices have CE, RoHS, EIC 62471, are certified for Electromagnetic Compatibility and in line with Low Voltage Directive. Additionally our manufacturing processes are in line with ISO 9001 and ISO 14001.

What testing and certification for health and safety does this UVISAN have?

CE, RoHS, EIC 62471, Electromagnetic Compatibility/Low Voltage Directive, ISO 9001, ISO 14001, Sterilization Efficacy Evaluation certificate.

How does it work?

Ultraviolet germicidal irradiation (UVGI) is a disinfection method that uses short-wavelength ultraviolet (ultraviolet C or UVC) light to kill or inactivate microorganisms by destroying nucleic acids and disrupting their DNA, leaving them unable to perform vital cellular functions. UVGI is used in a variety of applications, such as food, air, and water purification.

Does the product kill Covid?

It is scientifically proven that UVGI kills all the bacteria, spores, viruses, protozoans, moulds and yeasts. The level of UV irradiance we have in our cabinets will kill 99.9% of Poliovirus 1, SARS, H-CoV 229E, H-CoV OC43, H-CoV 229E, Influenza A (H1N1), Covid 19 in under one minute of exposure. The longer the exposure, the higher log reduction is achieved. (*ref.: M. Buonanno, D. Welch, I. Shuryak, D.J. Brenner; DOI: 10.21203/ rs.3.rs -25728/v1), (*ref.: Tree et al. 2005), (*ref.: CDC, 2020)

Has a laboratory certified that?

We are using medical grade UVGI lamps, which are proven to kill the bacteria, spores, viruses, protozoans, moulds and yeasts. We have a third party lab certificate confirming antibacterial effectiveness, we are currently scoping third party antiviral tests.

Is the product safe for me/the operators eyes; skin etc?

Yes, it is completely safe for users and the public. Our cabinets are designed the way that no radiation will escape. We can back this up with EIC 62471 Photobiological Safety certificate; we are in the Exempt group – the highest safety standard. Additionally all devices are equipped with a door safety switch preventing accidental light exposure (in case if the doors are opened during sanitization cycle).



Find below answers to the most common asked questions.

Is it environmentally unsound - I hear it produces ozone?

NIOSH (National Institute for Occupational Safety and Health) defines a safe exposure limit for ozone at 0.1ppm. Our lamps combined production is very small – 0.07 particles per million (measured inside of the cabinet at the maximum concentration). Ozone is an excellent disinfectant and in our cabinets adds to the sanitization effect. The air containing ozone is extracted by a specially designed filtration system, which turns O3 into O2.Concentration after the catalyst filter is negligible. The UV sanitation in comparison to various chemicals it's very clean and environmentally friendly and most importantly does not leave any residue on disinfected surfaces.

What can I NOT clean in it?

No liquids and no living creatures are allowed inside of our cabinets.

Other than that, almost every commonly used item which needs a surface disinfection can be cleaned. Metals, various plastics, cardboard, rubber surfaces can be effectively sanitized in our devices.

What certifications do you have?

CE, RoHS, EIC 62471, Electromagnetic Compatibility/Low Voltage Directive, ISO 9001, ISO 14001, Sterilization Efficacy Evaluation certificate.

Does it meet EU law requirements for this type of equipment?

Yes, it does (CE, RoHS, EIC 62471, Electromagnetic Compatibility/ Low Voltage Directive, ISO 9001, ISO 14001, Sterilization Efficacy Evaluation certificate).

Do you provide a guarantee/ support service?

Yes, we have a standard year guarantee and we provide customer support.

Can it damage what I put into it?

We have done excessive stress testing with various headsets and other popular electronic devices (mobile phones, tablets etc) simulating 1.5 year of standard usage. We observed no impact of the UVC radiation neither on the appearance nor on functionality.

Is there any fire risk?

All the electric and electronic devices are protected by circuit breaker and RCD module. Also during normal operation the temperature inside the cabinet is in the region between 20 and 30 degrees Celsius. Additionally the cabinet is made of non combustible materials (mostly steel)

What weight can the shelfs take?

10 kg per shelf is the maximum we recommend.

What are the internal dimensions of the shelves?

VR12: D500*W600*H200mm VR20,VR30: D500*W750*H200mm

Height is adjustable – each shelf can move up and down by 4cm. Due to modular construction there is also the possibility of shelves removal. The standard vertical clearance between the shelves is 20cm, maximum clearance (with two shelves adjacent) is 28cm.

How is the machine calibrated so it always achieves 264nm?

It is specific to the lamp – an electric discharge produces UV radiation in a very narrow ban (peak exactly at 254nm). There are also small "sidebands" produced in a visible range (over 400nm) – this is the pale blue colour characteristic to all UVGI lamps.



Find below answers to the most common asked questions.

What is the shelf life of the machine? Does it always achieve 264nm over the life cycle? Is there an indicator for this?

Lamps offer almost constant UV output over their complete lifetime, for maximum security of disinfection and high system efficacy – always 254nm. Lifespan of our lamps is 8000 hours. With a standard working cycle (4 cycles an hour, 8 hours a day, 5 days a week) – annually this accounts to 693 hours.

What is covered under the warranty?

- 1. Limitations of Warranty. We make no warranties to any third party.
- 2. Disclaimer of Warranty. Except as expressly provided otherwise herein and to the maximum extent permitted by applicable law, we disclaim all other warranties with respect to the product, whether express, implied, statutory or otherwise, including without limitation, satisfactory quality, course of dealing, trade usage or practice or the implied warranties of merchantability, fitness for a particular purpose or non infringement of third party rights.
- 3. Limitation of Liability. In no event shall we be liable for indirect, incidental, special, exemplary, punitive, or consequential damages of any nature including, but not limited to, loss of profits, data, revenue, production, or use, business interruption, or procurement of substitute goods or services arising out of or in connection with this limited warranty, or the use or performance of any product, whether based on contract or tort, including negligence, or any other legal theory, even if we has advised of the possibility of such damages. Our total, aggregate liability for damages of any nature, regardless of form of action, shall in no event exceed the amount paid by you to us for the

specific product upon which liability is based

What is the environmental operating temperatures.maximum/minimum.

The cabinets are designed to work in ambient room temperatures (temperature range 18 – 30 degrees celsius). Cabinets are not designed to work in wet or cold conditions.

Can the unit be left on overnight?

Yes.

Does it need to be switched off after the cycle is complete?

VR12 200W

VR 20 250W

VR30 330W

Do you supply replacement parts?

Yes.

Do I have to clean the inside or outside of the UVISAN cabinet – the door/ handles etc – is their any residue inside of dirt or viruses etc?

We recommend dusting the cabinets with soft cloth as a standard daily practice. Outside ofthe cabinet should be wiped with 70% alcohol wipes.

should a user wear gloves to remove items?

We would suggest gloves are worn as an extra precaution.