

## **American Ultraviolet**<sup>®</sup>

Insightful Solutions. Remarkable Results. Since 1960.

The MRS33-8 mobile UVC unit can accommodate medium to large sized rooms, including patient, social, office, daycare environments, schools and universities. It can easily fit into public transportation vehicles for quick disinfection.

UVC energy has been shown to inactivate microorganisms and viruses on surfaces and in the air providing an additional layer of cleaning to many environments.

## FEATURE

- Control with WiFi-enabled device
- Downloadable WiFi reports
- Track user and location
- Eight (8) 33" slimline UVC lamps
- Polished reflector for maximum intensity
- Small footprint allows for use in tight spaces
- Passive infrared motion and heat sensors for 360° automatic shut off
- Large, high-quality locking casters
- Operates at 120 or 220 Volt; 50/60 Hertz
- Formed stainless tube structure protects lamps/simplifies handling and transport



UVC Lamps (8)

> 360<sup>°</sup> Motion Sensor

**Germicidal Soluti** 

**MRS33-8** 

8-Lamp Mobile Room Solution





Each microorganism has a specific k-value, which simply means that a specific amount of UVC dose (UVC Dose = UVC intensity x time) will break the DNA / RNA bonds of the DNA / RNA chain. When a certain amount of UVC dose is applied, the microorganism will no longer be able to replicate<sup>2</sup>.

Using the American Ultraviolet Inactivation Chart<sup>1</sup> and the table on this page, cycle times can be estimated by targeting the lethal dose for the microorganisms.

$1 \text{ mJ/cm}^2 = 1000 \ \mu\text{W-s/cm}^2$						
Time (minutes)	24"(0.6m)	36"(0.9m)	60"(1.5m)	120"(3m)		
5	620	325	120	30		
10	1240	650	240	60		
15	1860	974	361	92		
30	3719	1947	722	184		
45	5579	2921	1082	275		
60	7438	3895	1443	367		



One size mobile UVC device does not fit all environments and budgets. We offer solutions that fit.

COMPARISON OF MOBILE UVC DEVICES							
	ARTZ 2.0®	MRS45-12	MRS33-8	MRS14-4			
Lamp Qty	24	12	8	4			
Lamp Size	45"	45"	33"	14"			
Controller	Any WiFi enabled Device	Any WiFi enabled Device	Any WiFi enabled Device	Digital Controller w/ Remote ON/OFF			
Data Logging	Yes	Yes	Yes	No			
360° Motion & IR Sensing	Yes	Yes	Yes	Yes			
Weight	130 lbs (59kg)	95 lbs (43kg)	80 lbs (36kg)	20 lbs (9kg)			
Dimensions	67"H x 28"W x 31"D	67"H x 26"W x 26"D	47"H x 20"W x 20"D	25"H x 10"W x 10"D			
Amperage Draw at 120V	15A	8A	4A	1A			
Power Cord	Retractable 20'	15'	15'	8'			
Replacement Lamps	GML 515	GML 515	GML 100	GML 600A			

<sup>1</sup> Based on current literature such as Ultraviolet Germicidal Irradiation Handbook 2009 by Kowalski;

<sup>2</sup> ASHRAE Applications Handbook Ch 62 UVC for Air and Surface Disinfection

All American Ultraviolet mobile devices are designed to provide UVC energy. No warranty is offered, or responsibility taken, by American Ultraviolet, in regards to the process or efficacy of the device, as American Ultraviolet has no control over the use of the device. American Ultraviolet makes no claims to the actual log reduction of microorganisms, as it can greatly vary depending on environment. UVC is an adjunct cleaning method, and dirt, dust, and debris should be removed from surfaces before UVC application..

Prolonged, direct exposure to UVC light can cause temporary skin redness and eye irritation. American Ultraviolet devices are designed with safety in mind and, when used in accordance with the Operation and Maintenance Manual, do not allow exposure to UVC radiation, and do allow for safe operation and maintenance



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