



DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION
OFFICE OF STATEWIDE HOSPITAL PLANNING AND DEVELOPMENT

**APPLICATION FOR HCAI SPECIAL SEISMIC
CERTIFICATION PREAPPROVAL (OSP)**

OFFICE USE ONLY

APPLICATION #: OSP-0670

HCAI Special Seismic Certification Preapproval (OSP)

Type: New Renewal

Manufacturer Information

Manufacturer: AMETEK Powervar

Manufacturer's Technical Representative: Dave Barrera

Mailing Address: 1450 Lakeside Drive, Waukegan, IL 60085

Telephone: (224) 225-4439

Email: Dave.barrera@ametek.com

Product Information

Product Name: 3300 UPS

Product Model Number(s): See attached

Product Category: UPS and Batteries

Product Sub-Category: UPS

General Description: The UUTs are enclosures that contain a Main Board/IGBT, Battery, Control Board, Fuse PCB, Fan, Inductor.

Mounting Description: Base Mounted Rigid

Tested Seismic Enhancements: None

Applicant Information

Applicant Company Name: DCL Labs, LLC

Contact Person: Nastya Veyngerova

Mailing Address: 1315 Greg St, Sparks, NV 89431

Telephone: (775) 358-5085

Email: nastya.veyngerova@shaketest.com

Title: Seismic Test Engineer



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California Licensed Structural Engineer Responsible for the Engineering and Test Report(s)

Company Name: THE VMC GROUP

Name: Kenneth Tarlow California License Number: S2851

Mailing Address: 980 9th Street, 16th Floor, Sacramento, CA 95814

Telephone: (832) 627-2214 Email: ken.tarlow@thevmcgroup.com

Certification Method

- GR-63-Core
 ICC-ES AC156
 IEEE 344
 IEEE 693
 NEBS 3
 Other (Please Specify): _____

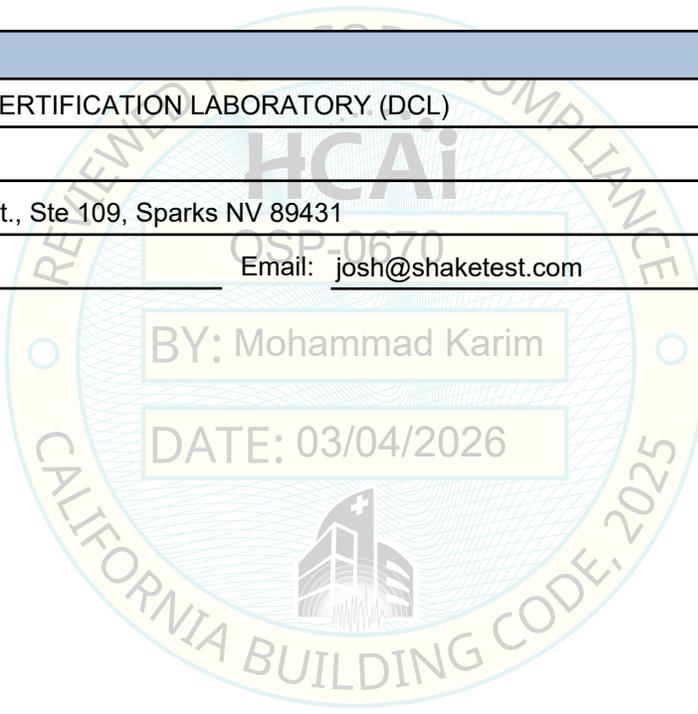
Testing Laboratory

Company Name: DYNAMIC CERTIFICATION LABORATORY (DCL)

Contact Person: Josh Sailer

Mailing Address: 1315 Greg St., Ste 109, Sparks NV 89431

Telephone: (775) 358-5085 Email: josh@shaketest.com





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Seismic Parameters

Certified Response Spectral Acceleration Factors:(F_p/W_p)

Horizontal	(A Flx-H), g=	<u>3.20</u>	(A Rig-H), g=	<u>2.15</u>
Vertical	(A Flx-V), g=	<u>1.67</u>	(A Rig-V), g=	<u>0.67</u>

SDS (Design spectral response acceleration at short period, g) = 2.0 (z/h = 1.0), 2.5 (z/h = 0.0)

Hf (Force amplification height factor) = 3.5 at z/h=1.0; 1.0 at z/h=0

Ru (Structure ductility reduction factor) = 1.3 at z/h=1.0; 1.0 at z/h=0

I_p (Importance factor) = 1.5

z/h (Height ratio factor) = 0 and 1

HCAI Approval (For Office Use Only) - Approval Expires on 03/04/2032

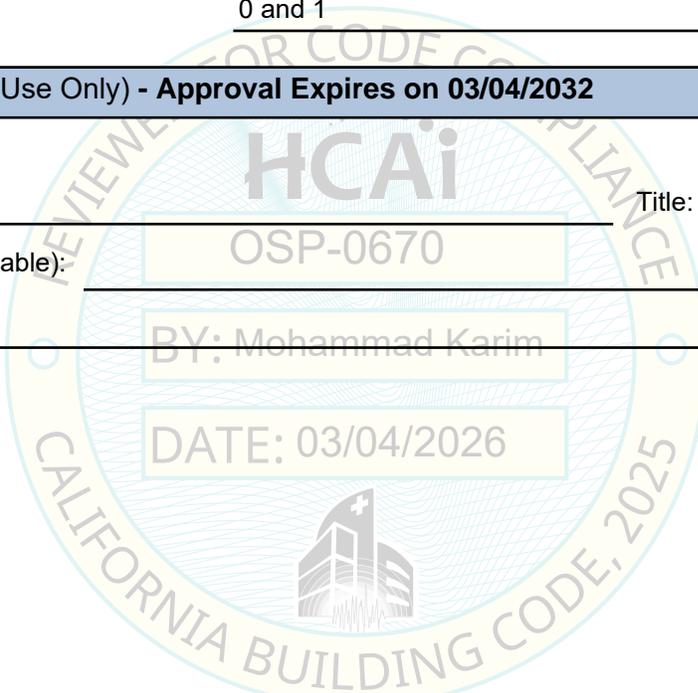
Date: 3/4/2026

Name: Mohammad Karim Title: Supervisor, Health Facilities

Condition of Approval (if applicable): OSP-0670

BY: Mohammad Karim

DATE: 03/04/2026



Special Seismic Certification
Table 1 - Certified Components



DCL Project Number: 06017-2601

Manufacturer: Ametek Powervar

Product Line: 3300 UPS

Certified Product Construction: Painted Carbon Steel

Mounting: Rigid Base Mounted

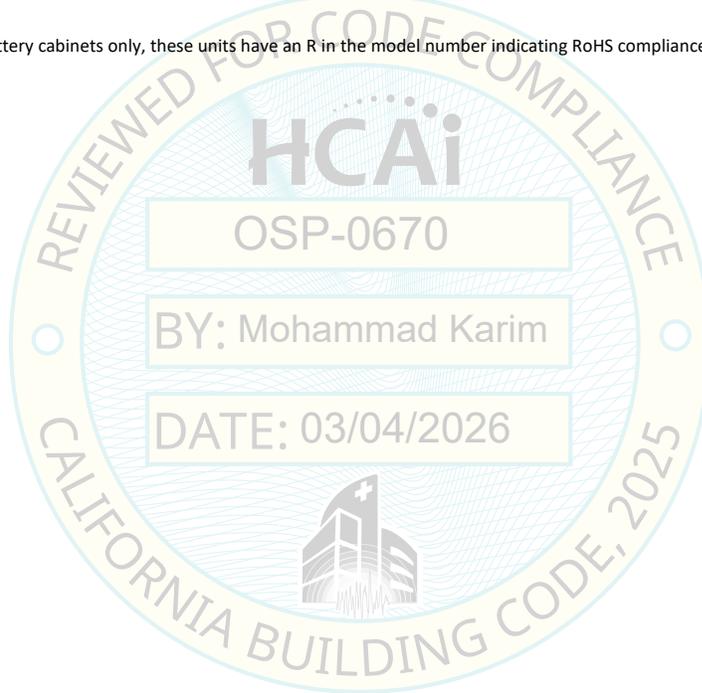
Certified Seismic Levels: Sds=2.00g with z/h=1.0 and Sds=2.50g with z/h=0.0

Factors for Force Amplification and Structure Ductility Reduction: $H_f = 3.5$ at z/h=1.0; 1.0 at z/h=0 and $R_{\mu} = 1.3$ at z/h=1.0; 1.0 at z/h=0

Model Number	Max. Dimensions [in.]			Max. Weight [lb.]	Unit
	Depth	Width	Height		
33010-XX	24.8	9.8	32.5	220	UUT1
33015-XX	32.9	11.8	40.0	397	Interpolated
33020-XX	30.8	12.0	40.3	520	UUT2
33030-XXR	32.0	16.5	47.3	240	Interpolated ¹
33040-XXR	31.5	16.5	47.5	280	UUT3 ¹

Notes:

1. Units operate with external battery cabinets only, these units have an R in the model number indicating RoHS compliance.



Special Seismic Certification

Table 2 - Certified Subcomponents



DCL Project Number: 06017-2601

Product Line: 3300 UPS

Certified Seismic Levels: Sds=2.00g with z/h=1.0 and Sds=2.50g with z/h=0.0

Subcomponent Type	Model Number	Description	Material	Weight [lb.]	Unit
Main Board / Insulated Gate Bipolar Transistor (IGBT)	A26-00325	PCBA, MAIN, 10K/20K/40K, 3300, SRV	PCBA	18	UUT1, UUT2, UUT3
	A26-00326	PCBA, MAIN, 15K/30K, 3300, SRV	PCBA	18	Same As Tested ¹
Battery	A14-00015	VRLA Battery, 12V 460w (UUT1 qty. = 20, UUT2 qty. = 60)	ABS Flame retardant	6	UUT1, UUT2
Control Board	A26-00320	PCBA, CONTROL, 15K/20K/30K/40K	PCBA	2	UUT1, UUT2, UUT3
Fuse PCB	A26-00329	PCBA, BAT FUSE EMI, 10K, 3300, SRV	PCBA	<1	UUT1
	A26-00328	PCBA, BAT FUSE EMI, 15K/30K, 3300, SRV	PCBA	<1	Interpolated
	A26-00327	PCBA, BAT FUSE EMI, 20K/40K, 3300, SRV	PCBA	<1	UUT2, UUT3
Enclosure	33010-XX-E	Steel chassis w/ 2 inner shelves; two steel side panels	Carbon Steel	105	UUT1
	33015-XX-E	Steel chassis w/ 3 inner shelves; two steel side panels	Carbon Steel	181	Interpolated
	33020-XX-E	Steel chassis w/ 3 inner shelves; two steel side panels	Carbon Steel	185	UUT2
	33030-XXR-E	Steel chassis w/ 1 inner shelf; two steel side panels	Carbon Steel	297	Interpolated
	33040-XXR-E	Steel chassis w/ 1 inner shelf; two steel side panels	Carbon Steel	304	UUT3
Fan	A37-00065	FAN, FAN 1 (CN3), 10K, 3300, SRV	Poly Butylene	<1	UUT1
	A37-00066	FAN, FAN 2 (CN7), 10K, 3300, SRV	Poly Butylene	<1	UUT1
	A37-00067	FAN, FAN 1 (CN3), 15K/20K/40K, 3300, SRV	Poly Butylene	<1	UUT2, UUT3
	A37-00068	FAN, FAN 3 (CN4), 15K/20K, 3300, SRV	Poly Butylene	<1	UUT2
	A37-00069	FAN, FAN 2 (CN7), 15K/20K, 3300, SRV	Poly Butylene	<1	UUT2
	A37-00070	FAN, FAN 4 (CN2), 15K/20K, 3300, SRV	Poly Butylene	<1	UUT2
	A37-00071	FAN 1, FAN 4 (CN2), 30K/40K, 3300, SRV	Poly Butylene	<1	Interpolated
	A37-00073	FAN, FAN 3 (CN4), 30K, 3300, SRV	Poly Butylene	<1	Interpolated
	A37-00074	FAN, FAN 1 (CN3), 30K, 3300, SRV	Poly Butylene	<1	Interpolated
	A37-00076	FAN, FAN 3 (CN4), 40K, 3300, SRV	Poly Butylene	<1	UUT3
	A37-00077	FAN, FAN 2 (CN7), 40K, 3300, SRV	Poly Butylene	<1	UUT3
A37-00072	FAN 2, FAN 4 (CN2), 30K/40K, 3300, SRV	Poly Butylene	<1	UUT3	
Inductor	A26-00348	PCBA, INV, 10K, 3300, SRV	PCBA	<1	UUT1
	A26-00331	PCBA, INDUCTOR, 15K/20K/30K/40K, 3300, SRV	PCBA	18	UUT1, UUT2, UUT3

Note:

- Product is same as tested in IGBT category with different part number.

Special Seismic Certification
Table 3 - Tested Units



DCL Project Number: 06017-2601

Manufacturer: Ametek Powervar

Product Line: 3300 UPS

Certified Product Construction: Painted Carbon Steel

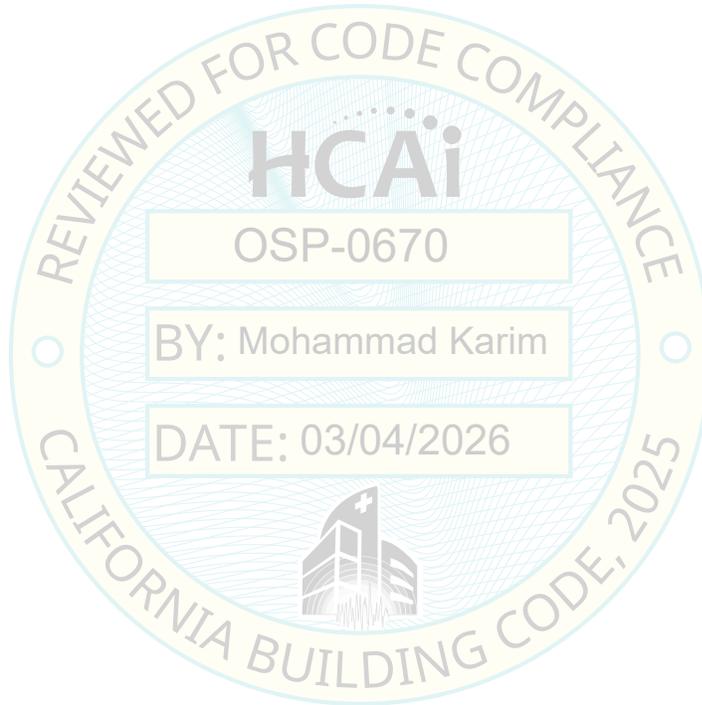
DCL Report Number: 26606-2001

Mounting: Rigid Base Mounted

Certified Seismic Levels: $S_{ds}=2.00g$ with $z/h=1.0$ and $S_{ds}=2.50g$ with $z/h=0.0$

Factors for Force Amplification and Structure Ductility Reduction: $H_f = 3.5$ at $z/h=1.0$; 1.0 at $z/h=0$ and $R_{\mu} = 1.3$ at $z/h=1.0$; 1.0 at $z/h=0$

Model Number	Dimensions [in.]			Weight [lb.]	Unit
	Length	Width	Height		
33010-XX	24.8	9.8	32.5	220	UUT1
33020-XX	30.8	12.0	40.3	520	UUT2
33040-XXR	31.5	16.5	47.5	280	UUT3



UNIT UNDER TEST (UUT) Summary Sheet



UUT1

DCL Report Number: 27344-2001

Test Dates: July 31, 2020

Manufacturer: Ametek Powervar

Product Line: 3300 UPS

Model Number: 33010-XX

Product Construction Summary: Painted Carbon Steel

Options / Component Summary:

Subcomponent Type	Model Number	Material
Main Board / Insulated Gate Bipolar Transistor (IGBT)	A26-00325	PCBA
Battery	A14-00015	ABS Flame retardant
Control Board	A26-00320	PCBA
Fuse PCB	A26-00329	PCBA
Enclosure	33010-XX-E	Carbon Steel
Fan	A37-00065	Poly Butylene
Fan	A37-00066	Poly Butylene
Inductor	A26-00331	PCBA
Inductor	A26-00348	PCBA

Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained before and after the AC 156 test.

UUT Properties

Operating Weight (lb)	Dimensions (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
220	24.8	9.8	32.5	>33.3	>33.3	>33.3

Seismic Test Parameters

Building Code	Test Criteria	Sds (g)	z/h	H _r	R _μ	I _p	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)
CBC 2025	ICC-ES	2.00	1.0	3.5	1.3	1.5	3.20	2.40	N/A	N/A
	AC156-24	2.50	0.0	1.0	1.0		N/A	NA	1.67	0.67

Unit Mounting Description: UUT1 was mounted to the table interface plate with (12) 3/8" Grade 5 bolts and washers via (4) manufacturer provided brackets with (3) bolts per bracket to the shake table. The bolts are spaced depthwise from the front 3.5", 3.5", 7", 3.5", and 3.75". The bolts were spaced widthwise 12.5". UUT1 was mounted with (4) manufacturer provided 7 gauge painted carbon steel brackets, each mounted to the UUT utilizing (5) M8-1.25 x 16mm Class 8.8 bolts. Model numbers for the brackets are A05-01002 and A05-01003. There were (2) of each bracket model.



Figure 1. Overall UUT



Figure 2. Bracket Mounting

UNIT UNDER TEST (UUT) Summary Sheet



UUT2

DCL Report Number: 27344-2001

Test Dates: July 31, 2020

Manufacturer: Ametek Powervar

Product Line: 3300 UPS

Model Number: 33020-XX

Product Construction Summary: Painted Carbon Steel

Options / Component Summary:

Subcomponent Type	Model Number	Material
Main Board / Insulated Gate Bipolar Transistor (IGBT)	A26-00325	PCBA
Battery	A14-00015	ABS Flame retardant
Control Board	A26-00320	PCBA
Fuse PCB	A26-00327	PCBA
Enclosure	33020-XX-E	Carbon Steel
Fan	A37-00067	Poly Butylene
Fan	A37-00068	Poly Butylene
Fan	A37-00069	Poly Butylene
Fan	A37-00070	Poly Butylene
Inductor	A26-00331	PCBA

Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained before and after the AC 156 test.

UUT Properties

Operating Weight (lb)	Dimensions (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
520	30.8	12.0	40.3	22.5	>33.3	>33.3

Seismic Test Parameters

Building Code	Test Criteria	Sds (g)	z/h	H _f	R _μ	I _p	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)
CBC 2025	ICC-ES	2.00	1.0	3.5	1.3	1.5	3.20	2.40	N/A	N/A
	AC156-24	2.50	0.0	1.0	1.0		N/A	NA	1.67	0.67

Unit Mounting Description: UUT2 was mounted to the table interface with (12) 3/8" Grade 5 bolts and washers via (4) manufacturer provided brackets with (3) bolts per bracket. The bolts were spaced depthwise starting from the front of the units 5", 3.5", 10", 3.5", and 5". The bolts were spaced widthwise 15". UUT2 was mounted with (4) manufacturer provided 7 gauge painted carbon steel brackets, each mounted to the UUT utilizing (5) M8-1.25 x 16mm Class 8.8 bolts. Model numbers for the brackets are A05-01004 and A05-01005. There were (2) of each bracket model.



Figure 1. Overall UUT



Figure 2. Bracket Mounting

UNIT UNDER TEST (UUT) Summary Sheet



UUT3

DCL Report Number: 27344-2001

Test Dates: July 31, 2020

Manufacturer: Ametek Powervar

Product Line: 3300 UPS

Model Number: 33040-XXR

Product Construction Summary: Painted Carbon Steel

Options / Component Summary:

Subcomponent Type	Model Number	Material
Main Board / Insulated Gate Bipolar Transistor (IGBT)	A26-00325	PCBA
Control Board	A26-00320	PCBA
Fuse PCB	A26-00327	PCBA
Enclosure	33040-XXR-E	Carbon Steel
Fan	A37-00067	Poly Butylene
Fan	A37-00076	Poly Butylene
Fan	A37-00077	Poly Butylene
Fan	A37-00072	Poly Butylene
Inductor	A26-00331	PCBA

Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained before and after the AC 156 test.

UUT Properties

Operating Weight (lb)	Dimensions (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
280	31.5	16.5	47.5	24.0	>33.3	28.5

Seismic Test Parameters

Building Code	Test Criteria	Sds (g)	z/h	H _i	R _μ	I _p	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)
CBC 2025	ICC-ES	2.00	1.0	3.5	1.3	1.5	3.20	2.40	N/A	N/A
	AC156-24	2.50	0.0	1.0	1.0		N/A	NA	1.67	0.67

Unit Mounting Description: UUT3 was mounted to the table interface plate with (12) 3/8" Grade 5 bolts and washers via (4) manufacturer provided brackets with (3) bolts per bracket. The bolts were spaced depthwise from the front of the unit 5", 3.75", 8.5", 5" and 5.5". The bolts were spaced widthwise 19.5". UUT3 was mounted with (4) manufacturer provided 7 gauge painted carbon steel brackets, each mounted to the UUT utilizing (5) M8-1.25 x 16mm Class 8.8 bolts. Model numbers for the brackets are A05-01006, A05-01007, A05-01111, and A05-01112. There were (1) of each bracket model.



Figure 1. Overall UUT



Figure 2. Bracket Mounting