



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-0659

HCAI Special Seismic Certification Preapproval (OSP)

Type: ☐ New ☒ Renewal

Manufacturer Information

Manufacturer: Online Power Inc.

Manufacturer's Technical Representative: Sherri Shahsavari

Mailing Address: 14000 South Broadway St., Los Angeles, CA 90061

Telephone: (818) 426-9307

Email: sherris@onlinepower.com

Product Information

Product Name: Power Wave 4

Product Model Number(s): See Attachments

Product Category: UPS and Batteries

Product Sub-Category: UPS

General Description: Uninterruptible Power Supply (UPS) and Maintenance Bypass Cabinet (MBC)

Mounting Description: Base Mounted Rigid -

Tested Seismic Enhancements: None

Applicant Information

Applicant Company Name: Pre Compliance

Contact Person: Galen Reid

Mailing Address: 324 NW Hill St., Bend, OR 97703

Telephone: (541) 241-2310

Email: galen@go-pre.com

Title: Principal and Program Manager



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

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

Company Name: PRE COMPLIANCE

Name: Andrew Coughlin

California License Number: S6082

Mailing Address: 324 NW Hill St, Bend, OR 97703

Telephone: (415) 635-8461

Email: Andy@go-pre.com

Certification Method

☐ GR-63-Core

☒ ICC-ES AC156

☐ IEEE 344

☐ IEEE 693

☐ NEBS 3

☐ Other (Please Specify): _____

Testing Laboratory

Company Name: ENVIRONMENTAL TESTING LABORATORIES, INC. (ETL)

Contact Person: Jeremy Lange

Mailing Address: 11034 Indian Trail, Dallas TX 75229-3513

Telephone: (972) 247-9657

Email: Jeremy@etldallas.com

BY: Mohammad Karim

DATE: 07/31/2025



DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION
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Seismic Parameters

Certified Response Spectral Acceleration Factors: (F_p/W_p)

Horizontal (A Flx-H), $g =$ 1.60 (A Rig-H), $g =$ 0.64

Vertical (A Flx-V), $g =$ 1.07 (A Rig-V), $g =$ 0.43

S_{DS} (Design spectral response acceleration at short period, g) = 1.60

H_f (Force amplification height factor) = 1.0

R_u (Structure ductility reduction factor) = 1.0

I_p (Importance factor) = 1.5

z/h (Height ratio factor) = 0

HCAI Approval (For Office Use Only) - Approval Expires on 07/31/2031

Date: 7/31/2025

Name: Mohammad Karim

Title: Supervisor, Health Facilities

Condition of Approval (if applicable): _____

BY: Mohammad Karim

DATE: 07/31/2025

SPECIAL SEISMIC CERTIFICATION CERTIFIED COMPONENTS

Manufacturer: Online Power Inc.
Product Type: UPS
Model Line: Power Wave 4

Seismic Parameters

$S_{DS} = 1.6g$ for $R_{\mu}=1.0$, $H_f=1.0$ $I_p=1.5$

Building Codes

CBC 2025

TABLE 1

Mounting Configuration: Base Mounted - Rigid

Construction Summary

Base & Top: 12 Ga. Carbon steel. **Back & Sides:** 14 Ga. Carbon Steel. **Doors:** 16 Ga. Carbon Steel

Options Summary

Input/Output voltage: 480Y/277 or 208Y/120

Model Line	Model	Max. Dimensions (in)			Wt. (lb)	Notes	UUT
		D	W	H			
Power Wave 4 (Cabinet Type A)	SV-PW010B05ATT3-BT	31.5	40.7	63	925		Interp.
	SV-PW020B05ATT3-BT	31.5	40.7	63	1168		Interp.
	SV-PW030B05ATT3-BT	31.5	40.7	63	1345		Interp.
	SV-PW040B05ATT3-BT	31.5	40.7	63	1499		Interp.
	SV-PW050B05ATT3-BT	31.5	40.7	63	1610		Interp.
	SV-PW010H05ATT3-BT	31.5	40.7	63	925		Interp.
	SV-PW020H05ATT3-BT	31.5	40.7	63	1168		Interp.
	SV-PW030H05ATT3-BT	31.5	40.7	63	1345		Interp.
	SV-PW040H05ATT3-BT	31.5	40.7	63	1499		Interp.
	SV-PW050H05ATT3-BT	31.5	40.7	63	1610		Interp.
	SV-PW010B09ATT3-BT	31.5	40.7	63	925		Interp.
	SV-PW020B09ATT3-BT	31.5	40.7	63	1168		Interp.
	SV-PW030B09ATT3-BT	31.5	40.7	63	1345		Interp.
	SV-PW040B09ATT3-BT	31.5	40.7	63	1499		Interp.
	SV-PW050B09ATT3-BT	31.5	40.7	63	1610		Interp.
	SV-PW010H09ATT3-BT	31.5	40.7	63	925		Interp.
	SV-PW020H09ATT3-BT	31.5	40.7	63	1168		Interp.
	SV-PW030H09ATT3-BT	31.5	40.7	63	1345		Interp.
	SV-PW040H09ATT3-BT	31.5	40.7	63	1499		Interp.
	SV-PW050H09ATT3-BT	31.5	40.7	63	1610		Interp.
	SV-PW010B05ATT3	31.5	40.7	63	925		Interp.
	SV-PW020B05ATT3	31.5	40.7	63	1168		Interp.
	SV-PW030B05ATT3	31.5	40.7	63	1345		Interp.
	SV-PW040B05ATT3	31.5	40.7	63	1499		Interp.
	SV-PW050B05ATT3	31.5	40.7	63	1610		Interp.
	SV-PW060B05ATT3	31.5	40.7	63	1737		Interp.
	SV-PW010H05ATT3	31.5	40.7	63	925		Interp.
	SV-PW020H05ATT3	31.5	40.7	63	1168		Interp.
	SV-PW030H05ATT3	31.5	40.7	63	1345		Interp.
	SV-PW040BH05ATT3	31.5	40.7	63	1499		Interp.

SPECIAL SEISMIC CERTIFICATION CERTIFIED COMPONENTS

Manufacturer: Online Power Inc.
Product Type: UPS
Model Line: Power Wave 4

Seismic Parameters

$S_{DS} = 1.6g$ for $R_{\mu}=1.0$, $H_f=1.0$ $I_p=1.5$

Building Codes

CBC 2025

TABLE 1

Mounting Configuration: Base Mounted - Rigid

Construction Summary

Base & Top: 12 Ga. Carbon steel. **Back & Sides:** 14 Ga. Carbon Steel. **Doors:** 16 Ga. Carbon Steel

Options Summary

Input/Output voltage: 480Y/277 or 208Y/120

Model Line	Model	Max. Dimensions (in)			Wt. (lb)	Notes	UUT
		D	W	H			
Power Wave 4 (Cabinet Type A)	SV-PW050H05ATT3	31.5	40.7	63	1610		Interp.
	SV-PW060H05ATT3	31.5	40.7	63	1737		Interp.
	SV-PW010B09ATT3	31.5	40.7	63	925		Interp.
	SV-PW020B09ATT3	31.5	40.7	63	1168		Interp.
	SV-PW030B09ATT3	31.5	40.7	63	1345		Interp.
	SV-PW040B09ATT3	31.5	40.7	63	1499		Interp.
	SV-PW050B09ATT3	31.5	40.7	63	1610		Interp.
	SV-PW060B09ATT3	31.5	40.7	63	1737		Interp.
	SV-PW010H09ATT3	31.5	40.7	63	925		Interp.
	SV-PW020H09ATT3	31.5	40.7	63	1168		Interp.
	SV-PW030H09ATT3	31.5	40.7	63	1345		Interp.
	SV-PW040BH09ATT3	31.5	40.7	63	1499		Interp.
	SV-PW050H09ATT3	31.5	40.7	63	1610		Interp.
	SV-PW060H09ATT3	31.5	40.7	63	1751		1
	SV-HP010B05ATT3	31.5	40.7	63	925		Interp.
	SV-HP020B05ATT3	31.5	40.7	63	1168		Interp.
	SV-HP030B05ATT3	31.5	40.7	63	1345		Interp.
	SV-HP040B05ATT3	31.5	40.7	63	1499		Interp.
	SV-HP050B05ATT3	31.5	40.7	63	1610		Interp.
	SV-HP060B05ATT3	31.5	40.7	63	1737		Interp.
	SV-HP010H05ATT3	31.5	40.7	63	925		Interp.
	SV-HP020H05ATT3	31.5	40.7	63	1168		Interp.
	SV-HP030H05ATT3	31.5	40.7	63	1345		Interp.
	SV-HP040H05ATT3	31.5	40.7	63	1499		Interp.
	SV-HP050H05ATT3	31.5	40.7	63	1610		Interp.
	SV-HP060H05ATT3	31.5	40.7	63	1737		Interp.
	SV-HP010B09ATT3	31.5	40.7	63	925		Interp.
	SV-HP020B09ATT3	31.5	40.7	63	1168		Interp.
	SV-HP030B09ATT3	31.5	40.7	63	1345		Interp.
	SV-HP040B09ATT3	31.5	40.7	63	1499		Interp.

SPECIAL SEISMIC CERTIFICATION CERTIFIED COMPONENTS

Manufacturer: Online Power Inc.
Product Type: UPS
Model Line: Power Wave 4

Seismic Parameters

$S_{DS} = 1.6g$ for $R_{\mu}=1.0$, $H_f=1.0$ $I_p=1.5$

Building Codes

CBC 2025

TABLE 1

Mounting Configuration: Base Mounted - Rigid

Construction Summary

Base & Top: 12 Ga. Carbon steel. **Back & Sides:** 14 Ga. Carbon Steel. **Doors:** 16 Ga. Carbon Steel

Options Summary

Input/Output voltage: 480Y/277 or 208Y/120

Model Line	Model	Max. Dimensions (in)			Wt. (lb)	Notes	UUT
		D	W	H			
Power Wave 4 (Cabinet Type A)	SV-HP050B09ATT3	31.5	40.7	63	1610		Interp.
	SV-HP060B09ATT3	31.5	40.7	63	1737		Interp.
	SV-HP010H09ATT3	31.5	40.7	63	925		Interp.
	SV-HP020H09ATT3	31.5	40.7	63	1168		Interp.
	SV-HP030H09ATT3	31.5	40.7	63	1345		Interp.
	SV-HP040H09ATT3	31.5	40.7	63	1499		Interp.
	SV-HP050H09ATT3	31.5	40.7	63	1610		Interp.
	SV-HP060H09ATT3	31.5	40.7	63	1737		Interp.
	SV-HP010B05ATT3-BT	31.5	40.7	63	925		Interp.
	SV-HP020B05ATT3-BT	31.5	40.7	63	1168		Interp.
	SV-HP030B05ATT3-BT	31.5	40.7	63	1345		Interp.
	SV-HP040B05ATT3-BT	31.5	40.7	63	1499		Interp.
	SV-HP050B05ATT3-BT	31.5	40.7	63	1610		Interp.
	SV-HP010H05ATT3-BT	31.5	40.7	63	925		Interp.
	SV-HP020H05ATT3-BT	31.5	40.7	63	1168		Interp.
	SV-HP030H05ATT3-BT	31.5	40.7	63	1345		Interp.
	SV-HP040H05ATT3-BT	31.5	40.7	63	1499		Interp.
	SV-HP050H05ATT3-BT	31.5	40.7	63	1610		Interp.
	SV-HP010B09ATT3-BT	31.5	40.7	63	925		Interp.
	SV-HP020B09ATT3-BT	31.5	40.7	63	1168		Interp.
	SV-HP030B09ATT3-BT	31.5	40.7	63	1345		Interp.
	SV-HP040B09ATT3-BT	31.5	40.7	63	1499		Interp.
	SV-HP050B09ATT3-BT	31.5	40.7	63	1610		Interp.
	SV-HP010H09ATT3-BT	31.5	40.7	63	925		Interp.
	SV-HP020H09ATT3-BT	31.5	40.7	63	1168		Interp.
	SV-HP030H09ATT3-BT	31.5	40.7	63	1345		Interp.
	SV-HP040H09ATT3-BT	31.5	40.7	63	1499		Interp.
	SV-HP050H09ATT3-BT	31.5	40.7	63	1610		Interp.
Power Wave 4 (Cabinet Type B)	SV-PW060B05ATT3-BT	31.5	62.4	63	1737		Interp.
	SV-PW080B05ATT3	31.5	62.4	63	1961		Interp.

SPECIAL SEISMIC CERTIFICATION CERTIFIED COMPONENTS

Manufacturer: Online Power Inc.
Product Type: UPS
Model Line: Power Wave 4

Seismic Parameters

$S_{DS} = 1.6g$ for $R_{\mu}=1.0$, $H_f=1.0$ $I_p=1.5$

Building Codes

CBC 2025

TABLE 1

Mounting Configuration: Base Mounted - Rigid

Construction Summary

Base & Top: 12 Ga. Carbon steel. **Back & Sides:** 14 Ga. Carbon Steel. **Doors:** 16 Ga. Carbon Steel

Options Summary

Input/Output voltage: 480Y/277 or 208Y/120

Model Line	Model	Max. Dimensions (in)			Wt. (lb)	Notes	UUT
		D	W	H			
Power Wave 4 (Cabinet Type B)	SV-PW100B05ATT3	31.5	62.4	63	2669		Interp.
	SV-PW120B05ATT3	31.5	62.4	63	2823		Interp.
	SV-PW060H05ATT3-BT	31.5	62.4	63	1737		Interp.
	SV-PW080H05ATT3	31.5	62.4	63	1961		Interp.
	SV-PW100H05ATT3	31.5	62.4	63	2669		Interp.
	SV-PW120H05ATT3	31.5	62.4	63	3223		Interp.
	SV-PW160H05ATT3	31.5	62.4	63	3317		Interp.
	SV-PW060H09ATT3-BT	31.5	62.4	63	1737		Interp.
	SV-PW080H09ATT3	31.5	62.4	63	1961		Interp.
	SV-PW100H09ATT3	31.5	62.4	63	2669		Interp.
	SV-PW120H09ATT3	31.5	62.4	63	2823		Interp.
	SV-PW160H09ATT3	31.5	62.4	63	3317		Interp.
	SV-PW060B09ATT3-BT	31.5	62.4	63	1737		Interp.
	SV-PW080B09ATT3	31.5	62.4	63	1961		Interp.
	SV-PW100B09ATT3	31.5	62.4	63	2669		Interp.
	SV-PW120B09ATT3	31.5	62.4	63	3223		Interp.
	SV-HP060B05ATT3-BT	31.5	62.4	63	1737		Interp.
	SV-HP080B05ATT3	31.5	62.4	63	1961		Interp.
	SV-HP100B05ATT3	31.5	62.4	63	2669		Interp.
	SV-HP120B05ATT3	31.5	62.4	63	3223		Interp.
	SV-HP060H05ATT3-BT	31.5	62.4	63	1737		Interp.
	SV-HP080H05ATT3	31.5	62.4	63	1961		Interp.
	SV-HP100H05ATT3	31.5	62.4	63	2669		Interp.
	SV-HP120H05ATT3	31.5	62.4	63	2823		Interp.
	SV-HP160H05ATT3	31.5	62.4	63	3317		Interp.
	SV-HP060H09ATT3	31.5	62.4	63	1737		Interp.
	SV-HP080H09ATT3	31.5	62.4	63	1961		Interp.
	SV-HP100H09ATT3	31.5	62.4	63	2669		Interp.
	SV-HP120H09ATT3	31.5	62.4	63	2823		Interp.
	SV-HP060B09ATT3-BT	31.5	62.4	63	1737		Interp.



Manufacturer: Online Power Inc.
Product Type: UPS
Model Line: Power Wave 4

Building Codes

S_{DS} = 1.6g for R_μ=1.0, H_f=1.0 I_p=1.5 CBC 2025

Mounting Configuration: Base Mounted - Rigid

Options Summary

Base & Top: 12 Ga. Carbon steel. **Back & Sides:** 14 Ga. Carbon Steel. **Doors:** 16 Ga. Carbon Steel

Input/Output voltage: 480Y/277 or 208Y/120

Pre Compliance

SPECIAL SEISMIC CERTIFICATION CERTIFIED COMPONENTS

Manufacturer: Online Power Inc.
Product Type: UPS
Model Line: Power Wave 4

Seismic Parameters

$S_{DS} = 1.6g$ for $R_{\mu}=1.0$, $H_f=1.0$ $I_p=1.5$

Building Codes

CBC 2025

TABLE 2

Mounting Configuration: Base Mounted - Rigid

Construction Summary

Base & Top: 12 Ga. Carbon steel. **Back & Sides:** 14 Ga. Carbon Steel. **Doors:** 16 Ga. Carbon Steel

Options Summary

Input/Output voltage: 480Y/277 or 208Y/120

Model Line	Model	Max. Dimensions (in)			Wt. (lb)	Notes	UUT
		D	W	H			
Maintenance Bypass Cabinet (MBC) Cabinet Type C	SV-NP010H0900I3-BT	31.5	28.75	63	526.5		3
	SV-NP020H0900I3-BT	31.5	28.75	63	558		Interp.
	SV-NP030H0900I3-BT	31.5	28.75	63	558		Interp.
	SV-NP040H0900I3-BT	31.5	28.75	63	558		Interp.
	SV-NP050H0900I3-BT	31.5	28.75	63	790		Interp.
	SV-NP060H0900I3-BT	31.5	28.75	63	790		Interp.
	SV-NP080H0900I3-BT	31.5	28.75	63	950		Interp.
	SV-NP100H0900I3-BT	31.5	28.75	63	950		Interp.
	SV-NP120H0900I3-BT	31.5	28.75	63	950		Interp.
	SV-NP160H0900I3-BT	31.5	28.75	63	950		Interp.
	SV-NP010H0500I3-BT	31.5	28.75	63	496		Interp.
	SV-NP020H0500I3-BT	31.5	28.75	63	558		Interp.
	SV-NP030H0500I3-BT	31.5	28.75	63	558		Interp.
	SV-NP040H0500I3-BT	31.5	28.75	63	558		Interp.
	SV-NP050H0500I3-BT	31.5	28.75	63	790		Interp.
	SV-NP060H0500I3-BT	31.5	28.75	63	790		Interp.
	SV-NP080H0500I3-BT	31.5	28.75	63	950		Interp.
	SV-NP100H0500I3-BT	31.5	28.75	63	950		Interp.
	SV-NP120H0500I3-BT	31.5	28.75	63	950		Interp.
	SV-NP160H0500I3-BT	31.5	28.75	63	950		Interp.
	SV-NP010B0900I3-BT	31.5	28.75	63	496		Interp.
	SV-NP020B0900I3-BT	31.5	28.75	63	558		Interp.
	SV-NP030B0900I3-BT	31.5	28.75	63	558		Interp.
	SV-NP040B0900I3-BT	31.5	28.75	63	558		Interp.
	SV-NP050B0900I3-BT	31.5	28.75	63	790		Interp.
	SV-NP060B0900I3-BT	31.5	28.75	63	790		Interp.
	SV-NP080B0900I3-BT	31.5	28.75	63	950		Interp.
	SV-NP010B0500I3-BT	31.5	28.75	63	496		Interp.
	SV-NP020B0500I3-BT	31.5	28.75	63	558		Interp.
	SV-NP030B0500I3-BT	31.5	28.75	63	558		Interp.



Manufacturer: Online Power Inc.
Product Type: UPS
Model Line: Power Wave 4

Building Codes

S_{DS} = 1.6g for R_μ=1.0, H_f=1.0 I_p=1.5 CBC 2025

Mounting Configuration: Base Mounted - Rigid

Options Summary

Input/Output voltage: 480Y/277 or 208Y/120

BY: Mohammad Karim

~~DATE: 07/31/2025~~

SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENTS

Manufacturer: Online Power Inc.
Product Type: UPS
Model Line: Power Wave 4

Seismic Parameters

$S_{DS} = 1.6g$ for $R_{\mu}=1.0$, $H_f=1.0$ $I_p=1.5$

Building Codes

CBC 2025

TABLE 3

Table Description: Transformers

Component (Manufacturer)	Model	Description	Notes	UUT
Input Transformer (Online Power Inc.)	ST-103A3-208360-9A	10kVA, 6 pulse, 208/120V, AI Winding	95 lbs.	Interp.
	ST-103A3-360480-9A	10kVA, 6 pulse, 480/277V, AI Winding	66 lbs.	Interp.
	ST-103IP-360360-9A	10kVA, 12 pulse, 208/120V, AI Winding	138 lbs.	Interp.
	ST-103IP-480360-9A2(Y)	10kVA, 12 pulse, 480/277V, AI Winding	119 lbs.	Interp.
	ST-203A3-208360-9A	20kVA, 6 pulse, 208/120V, AI Winding	141 lbs.	Interp.
	ST-203A3-360480-9AP10	20kVA, 6 pulse, 480/277V, AI Winding	103 lbs.	Interp.
	ST-203IP-360360-9A2	20kVA, 12 pulse, 208/120V, AI Winding	189 lbs.	Interp.
	ST-203IP-480360-9A2Y	20kVA, 12 pulse, 480/277V, AI Winding	157 lbs.	Interp.
	ST-303A3-208360-9A	30kVA, 6 pulse, 208/120V, AI Winding	196 lbs.	Interp.
	ST-303A3-360480-9A	30kVA, 6 pulse, 480/277V, AI Winding	141 lbs.	Interp.
	ST-303IP-360360-9A	30kVA, 12 pulse, 208/120V, AI Winding	276 lbs.	Interp.
	ST-303IP-480360-9A	30kVA, 12 pulse, 480/277V, AI Winding	215 lbs.	Interp.
	ST-403A3-208360-9AY	40kVA, 6 pulse, 208/120V, AI Winding	298 lbs.	Interp.
	ST-403A3-360480-9A	40kVA, 6 pulse, 480/277V, AI Winding	161 lbs.	Interp.
	ST-403IP-360360-9AY	40kVA, 12 pulse, 208/120V, AI Winding	346 lbs.	Interp.
	ST-403IP-480360-9A2Y	40kVA, 12 pulse, 480/277V, AI Winding	259 lbs.	Interp.
	ST-503A3-208360-9A	50kVA, 6 pulse, 208/120V, AI Winding	302 lbs.	Interp.
	ST-503A3-360480-9AY	50kVA, 6 pulse, 480/277V, AI Winding	183 lbs.	Interp.
	ST-503IP-360360-9A2	50kVA, 12 pulse, 208/120V, AI Winding	393 lbs.	Interp.
	ST-503IP-480360-9AY	50kVA, 12 pulse, 480/277V, AI Winding	289 lbs.	Interp.
	ST-603A3-208360-9A	60kVA, 6 pulse, 208/120V, AI Winding	278 lbs.	Interp.
	ST-603A3-360480-9A	60kVA, 6 pulse, 480/277V, AI Winding	294 lbs.	Interp.
	ST-603IP-360360-9A(12P)	60kVA, 12 pulse, 208/120V, AI Winding	449 lbs.	Interp.
	ST-603IP-480360-9A(12P)	60kVA, 12 pulse, 480/277V, AI Winding	449 lbs.	1
	ST-803IP-360360-9AY	80kVA, 12 pulse, 208/120V, AI Winding	536 lbs.	Interp.
	ST-803IP-480360-9AY(12P)	80kVA, 12 pulse, 480/277V, AI Winding	426 lbs.	Interp.
	ST-104IP-360360-9AY	100kVA, 12 pulse, 208/120V, AI Winding	728 lbs.	Interp.
	ST-104IP-480360-9AP10	100kVA, 12 pulse, 480/277V, AI Winding	505 lbs.	Interp.
	ST-124IP-360360-9A2	120kVA, 12 pulse, 208/120V, AI Winding	734 lbs.	Interp.
	ST-124IP-480360-9A2Y(12P)	120kVA, 12 pulse, 480/277V, AI Winding	602 lbs.	Interp.
	ST-164IP-208360-9A2Y	160kVA, 12 pulse, 208/120V, AI Winding	875 lbs.	Interp.
	ST-164IP-480360-9A2	160kVA, 12 pulse, 480/277V, AI Winding	666 lbs.	2

SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENTS

Manufacturer: Online Power Inc.
Product Type: UPS
Model Line: Power Wave 4

Seismic Parameters

Building Codes

$S_{DS} = 1.6g$ for $R_{\mu}=1.0$, $H_f=1.0$ $I_p=1.5$ **CBC 2025**

TABLE 3

Table Description: Transformers

Component (Manufacturer)	Model	Description	Notes	UUT
Output Transformer (Online Power Inc.)	ST-103I3-208120-9A	10kVA, 6 pulse, 208/120V, AI Winding	178 lbs.	Interp.
	ST-103I3-208277-9A2	10kVA, 6 pulse, 480/277V, AI Winding	175 lbs.	Interp.
	ST-103I3-208120-9A	10kVA, 12 pulse, 208/120V, AI Winding	178 lbs.	Interp.
	ST-103I3-208277-9A2	10kVA, 12 pulse, 480/277V, AI Winding	175 lbs.	Interp.
	ST-203I3-208120-9A	20kVA, 6 pulse, 208/120V, AI Winding	231 lbs.	Interp.
	ST-203I3-208277-9A2	20kVA, 6 pulse, 480/277V, AI Winding	237 lbs.	Interp.
	ST-203I3-208120-9A	20kVA, 12 pulse, 208/120V, AI Winding	175 lbs.	Interp.
	ST-203I3-208277-9A2	20kVA, 12 pulse, 480/277V, AI Winding	237 lbs.	Interp.
	ST-303I3-208060-9A2	30kVA, 6 pulse, 208/120V, AI Winding	316 lbs.	Interp.
	ST-303I3-208277-9A2	30kVA, 6 pulse, 480/277V, AI Winding	313 lbs.	Interp.
	ST-303I3-208060-9A2	30kVA, 12 pulse, 208/120V, AI Winding	316 lbs.	Interp.
	ST-303I3-208277-9A2	30kVA, 12 pulse, 480/277V, AI Winding	313 lbs.	Interp.
	ST-403I3-208060-9A	40kVA, 6 pulse, 208/120V, AI Winding	446 lbs.	Interp.
	ST-403I3-208277-9A	40kVA, 6 pulse, 480/277V, AI Winding	417 lbs.	Interp.
	ST-403I3-208060-9A	40kVA, 12 pulse, 208/120V, AI Winding	446 lbs.	Interp.
	ST-403I3-208277-9A	40kVA, 12 pulse, 480/277V, AI Winding	417 lbs.	Interp.
	ST-503I3-208060-9A	50kVA, 6 pulse, 208/120V, AI Winding	460 lbs.	Interp.
	ST-503I3-208277-9A	50kVA, 6 pulse, 480/277V, AI Winding	429 lbs.	Interp.
	ST-503I3-208060-9A	50kVA, 12 pulse, 208/120V, AI Winding	460 lbs.	Interp.
	ST-503I3-208277-9A	50kVA, 12 pulse, 480/277V, AI Winding	429 lbs.	Interp.
	ST-603I3-208120-9A2	60kVA, 6 pulse, 208/120V, AI Winding	503 lbs.	Interp.
	ST-603I3-208277-9A2	60kVA, 6 pulse, 480/277V, AI Winding	488 lbs.	Interp.
	ST-603I3-208120-9A2	60kVA, 12 pulse, 208/120V, AI Winding	503 lbs.	Interp.
	ST-603I3-208277-9A2	60kVA, 12 pulse, 480/277V, AI Winding	503 lbs.	1
	ST-803I3-208208-9AM10	80kVA, 12 pulse, 208/120V, AI Winding	728 lbs.	Interp.
	ST-803I3-208277-9AP10S	80kVA, 12 pulse, 480/277V, AI Winding	726 lbs.	Interp.
	ST-104I3-208208-9AS	100kVA, 12 pulse, 208/120V, AI Winding	866 lbs.	Interp.
	ST-104I3-208277-9A2S	100kVA, 12 pulse, 480/277V, AI Winding	840 lbs.	Interp.
	ST-124I3-208060-9A	120kVA, 12 pulse, 208/120V, AI Winding	990 lbs.	Interp.
	ST-124I3-208277-9A	120kVA, 12 pulse, 480/277V, AI Winding	913 lbs.	Interp.
	ST-164I3-208120-9A	160kVA, 12 pulse, 208/120V, AI Winding	1215 lbs.	Interp.
	ST-164I3-208277-9AS	160kVA, 12 pulse, 480/277V, AI Winding	1215 lbs.	2



Manufacturer: Online Power Inc.
Product Type: UPS
Model Line: Power Wave 4

Building Codes

CBC 2025

Table Description: Choke

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SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENTS

Manufacturer: Online Power Inc.
Product Type: UPS
Model Line: Power Wave 4

Seismic Parameters

$S_{DS} = 1.6g$ for $R_p=1.0$, $H_f=1.0$ $I_p=1.5$

Building Codes

CBC 2025

TABLE 5

Table Description: Circuit Breakers

Component (Manufacturer)	Model	Description	Notes	UUT
Circuit Breakers (ABB Inc.)	XT1HU3020AFF000XXX	3 POLE 20A, MCCB, 4lbs		Interp.
	XT1HU3030AFF000XXX	3 POLE 30A, MCCB, 4lbs		Interp.
	XT1HU3040AFF000XXX	3 POLE 40A, MCCB, 4lbs		Interp.
	XT1HU3060AFF000XXX	3 POLE 60A, MCCB, 4lbs		Interp.
	XT1HU3080AFF000XXX	3 POLE 80A, MCCB, 4lbs		Interp.
	XT1HU3100AFF000XXX	3 POLE 100A, MCCB, 4lbs		Interp.
	XT1HU3125AFF000XXX	3 POLE 125A, MCCB, 4lbs		Interp.
	XT1SU3015AFF000XXX	3 POLE 15A, MCCB, 4lbs		Interp.
	XT1SU3020AFF000XXX	3 POLE 20A, MCCB, 4lbs		1,3
	XT1SU3025AFF000XXX	3 POLE 25A, MCCB, 4lbs		Interp.
	XT1SU3030AFF000XXX	3 POLE 30A, MCCB, 4lbs		1,3
	XT1SU3035AFF000XXX	3 POLE 35A, MCCB, 4lbs		Interp.
	XT1SU3040AFF000XXX	3 POLE 40A, MCCB, 4lbs		3
	XT1SU3045AFF000XXX	3 POLE 45A, MCCB, 4lbs		Interp.
	XT1SU3050AFF000XXX	3 POLE 50A, MCCB, 4lbs		Interp.
	XT1SU3060AFF000XXX	3 POLE 60A, MCCB, 4lbs		Interp.
	XT1SU3070AFF000XXX	3 POLE 70A, MCCB, 4lbs		Interp.
	XT1SU3080AFF000XXX	3 POLE 80A, MCCB, 4lbs		Interp.
	XT1SU3090AFF000XXX	3 POLE 90A, MCCB, 4lbs		Interp.
	XT1SU3100AFF000XXX	3 POLE 100A, MCCB, 4lbs		Interp.
	XT1SU3125AFF000XXX	3 POLE 125A, MCCB, 4lbs		Interp.
	XT2NU3050AFF000XXX	3 POLE 50A, MCCB, 5lbs		1
	XT3NU3080AFF000XXX	3 POLE 80A, MCCB, 7lbs		Interp.
	XT3NU3125AFF000XXX	3 POLE 125A, MCCB, 7lbs		Interp.
	XT3NU3200AFF000XXX	3 POLE 200A, MCCB, 7lbs		2
	XT4HU3150AFF000XXX	3 POLE 150A, MCCB, 9lbs		Interp.
	XT4HU3175AFF000XXX	3 POLE 175A, MCCB, 9lbs		Interp.
	XT4HU3200AFF000XXX	3 POLE 200A, MCCB, 9lbs		Interp.
	XT4HU3225AFF000XXX	3 POLE 225A, MCCB, 9lbs		Interp.
	XT4HU3250AFF000XXX	3 POLE 250A, MCCB, 9lbs		Interp.
	XT4NU3150AFF000XXX	3 POLE 150A, MCCB, 9lbs		Interp.
	XT4NU3175AFF000XXX	3 POLE 175A, MCCB, 9lbs		Interp.
	XT4NU3200AFF000XXX	3 POLE 200A, MCCB, 9lbs		2,4
	XT4NU3225AFF000XXX	3 POLE 225A, MCCB, 9lbs		4



SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENTS

CBC 2025

Table Description: Circuit Breakers

01-C20	1 POLE 20A, MCCB, 1lb
04M-K20	4 POLE 20A, MCCB, 1lb
125AFF000XXX	4 POLE 125A, MCCB, 6lbs
60AFF000XXX	4 POLE 60A, MCCB, 6lbs
30AFF000XXX	4 POLE 30A, MCCB, 6lbs
800TW-A	2 POLE 300A, MCCB, 6lbs
0AFF000XXX + AXCQYFP	3 POLE 20A, W/AUX, MCCB, 6lbs
N300TW	3 POLE 300A, W/AUX, MCCB, 6lbs
N600BW	2 POLE 300A, MCCB, 6lbs
N400TW	3 POLE 400A, MCCB, 6lbs

SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENTS

Manufacturer: Online Power Inc.
Product Type: UPS
Model Line: Power Wave 4

Seismic Parameters

$S_{DS} = 1.6g$ for $R_{\mu}=1.0$, $H_f=1.0$ $I_p=1.5$

Building Codes

CBC 2025

TABLE 6

Table Description: Electrical Accessories

Component (Manufacturer)	Model	Description	Notes	UUT
Terminal Block (Dinkle)	DK10	DIN Rail Terminal Blocks, Screw Connection, M4, 600V, 60A		3
	DK16	DIN Rail Terminal Blocks, Screw Connection, M5, 600V, 100A		Interp.
	DK35	DIN Rail Terminal Blocks, Screw Connection, M6, 600V, 150A		Interp.
	DK50	DIN Rail Terminal Blocks, Screw Connection, M6, 600V, 150A		4
	DK95	DIN Rail Terminal Blocks, Screw Connection, M8, 600V, 230A		4
	DK150	DIN Rail Terminal Blocks, Screw Connection, M10, 600V, 275A		Interp.
	DK240	DIN Rail Terminal Blocks, Screw Connection, M10, 600V, 370A		4
Fuse Holder (Mersen)	USM1	Fuse Holder 1 Pole, 600V, 30A, DIN Rail		3,4
Fuse (Little Fuse)	FLQ1/2	0.5A 500VAC, TYPE SLO-BLO		3,4
Transient Voltage Suppressor (Ferraz)	ST4803PYG	TVSS 480Y/277V 3PH WYE		3,4
	ST2083PYG	TVSS 208Y/120V 3PH WYE		Interp.
Control Transformer (MCI)	4-49-6611	XFMR, Supply, 50VA, 60 Hz, PRI, 120/208V		3,4
Bypass Switch (EPC)	N40 US13779-01	SW, B/P, 4P, 600V, 50A, 5 AUX SW		Interp.
	A200 US13681-01	SW, B/P, 4P, 600V, 200A, 5 AUX SW		4
	N125 US13680-01	SW, B/P, 4P, 600V, 125A, 5 AUX SW		3



SPECIAL SEISMIC CERTIFICATION TESTING SUMMARY

Notes:



UUT 1

Manufacturer: Online Power Inc.
Model Line: Power Wave 4
Model Number: SV-PW060H09ATT3
Serial Number: N/A

S_{DS}	R_{μ}	H_f	I_p	$A_{\text{flx-h}}$	$A_{\text{rig-h}}$	$A_{\text{flx-v}}$	$A_{\text{rig-v}}$
1.6	1.0	1.0	1.5	1.60	0.64	1.07	0.43

Depth (in)	Width (in)	Height (in)	Weight (lbs.)
31.5	40.7	63	1751

Front-Back	Side-Side	Vertical
13.6	11.0	16.0

CBC 2025

ICC-ES AC156

Base & Top: 12 Ga. Carbon steel. **Back & Sides:** 14 Ga. Carbon Steel. **Doors:** 16 Ga. Carbon Steel

A black industrial power supply unit, likely a DC source, is shown. It has a digital display on the right side and two large control knobs or switches on the front. The unit is mounted on a yellow pallet. To the left, there is a blue and yellow piece of equipment, possibly a motor or another power source. The background shows a dark, industrial setting.

Description

Input Transformer	ST-603IP-480360-9A(12P)
Output Transformer	ST-603I3-208277-9A2
Inv Choke	ST-603INVC-A
Input Choke	ST-603RC-A
Circuit Breakers	XT1SU3020AFF000XXX
	XT1SU3030AFF000XXX
	XT2NU3050AFF000XXX
	XT1SU3020AFF000XXX + KXTAAXCQYFP

Unit maintained structural integrity and remained operational per manufacturer requirement following shake table test. All contents were included in the unit per operating conditions.



UUT 2

Test Report# 2000232-TR-001-R0

Highest Passed Test Level

S_{DS}	R_{μ}	H_f	I_p	$A_{\text{flx-h}}$	$A_{\text{rig-h}}$	$A_{\text{flx-v}}$	$A_{\text{rig-v}}$
1.6	1.0	1.0	1.5	1.60	0.64	1.07	0.43

Lowest Natural Frequency (Hz)

Depth (in)	Width (in)	Height (in)	Weight (lbs.)
31.5	62.4	63	3751

Front-Back	Side-Side	Vertical
10.2	8.1	>33.3

Construction/Option Summary

Base & Top: 12 Ga. Carbon steel. **Back & Sides:** 14 Ga. Carbon Steel. **Doors:** 16 Ga. Carbon Steel

List of Included Subcomponents



Description	Model #
Input Transformer	ST-164IP-480360-9A2
Output Transformer	ST-164I3-208277-9AS
Inv Choke	ST-164INVC-AM7
Input Choke	ST-164IPC-A
	XT3NU3200AFF000XXX
	XT4NU3200AFF000XXX
	XT4NU3250AFF000XXX
Circuit Breakers	T5N300TW-A
	T5N300TW
	T5N600BW
	T5N400TW

Unit maintained structural integrity and remained operational per manufacturer requirement following shake table test. All contents were included in the unit per operating conditions.



UUT 4

Manufacturer: Online Power Inc.
Model Line: Power Wave 4
Model Number: SV-NP080B0500I3-BT
Serial Number: N/A

S_{DS}	R_{μ}	H_f	I_p	$A_{\text{flx-h}}$	$A_{\text{rig-h}}$	$A_{\text{flx-v}}$	$A_{\text{rig-v}}$
1.6	1.0	1.0	1.5	1.60	0.64	1.07	0.43

Depth (in)	Width (in)	Height (in)	Weight (lbs.)
31.5	28.75	63	946

Front-Back	Side-Side	Vertical
17.9	13.2	25.0

Base & Top: 12 Ga. Carbon steel. **Back & Sides:** 14 Ga. Carbon Steel. **Doors:** 16 Ga. Carbon Steel

A200 US13681-01

Unit maintained structural integrity and remained operational per manufacturer requirement following shake table test. All contents were included in the unit per operating conditions.