

Title: Principal

DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION FACILITIES DEVELOPMENT DIVISION

OFFICE USE ONLY APPLICATION FOR HCAI SPECIAL SEISMIC **CERTIFICATION PREAPPROVAL (OSP)** APPLICATION #: OSP-0196 **HCAI Special Seismic Certification Preapproval (OSP)** Type: New Renewal **Manufacturer Information** Manufacturer: APC by Schneider Electric Manufacturer's Technical Representative: Kin Keat Mailing Address: 800 Federal Street, Andover, MA 01810 Telephone: (978) 975-9461 Email: kin.keat@se.com **Product Information** Product Name: UPS and Batteries Product Type: UPS Product Model Number: Symmetra LX Symmetra LX UPS units in seismic racks. Karim General Description: Mounting Description: Rigid, Floor Mounted Seismic enhancements made to the test units and/or modifications required to address Tested Seismic Enhancements: anomalies during the tests shall be incorporated into the production units. **Applicant Information** Applicant Company Name: Pre Compliance Contact Person: Galen Reid Mailing Address: 36 Southwest Wall Street, Bend, OR 97702-3425 Telephone: (541) 241-2310 Email: galen@go-pre.com





04/05/2023 OSP-0196 Page 1 of 11



DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION FACILITIES DEVELOPMENT DIVISION

ALL C	
California Licensed Structural Engineer Responsible fo	r the Engineering and Test Report(s)
Company Name: PRE COMPLIANCE	
Name: Andrew Coughlin	California License Number: S6082
Mailing Address: 36 SW Wall Street, Bend, OR 97702	
Telephone: (415) 635-8461 Email: Andy	@go-pre.com
Certification Method	
GR-63-Core X ICC-ES AC156	EEE 344
Other (Please Specify):	
EOR CO	DECO
Testing Laboratory	· · · Mp.
Company Name: NATIONAL TECHNICAL SYSTEMS (NTS)	
Contact Person: Clayton Forbes	2
Mailing Address: 1146 Massachusetts Avenue, Boxborough MA	01719
Telephone: (978) 266-1001 Email: clayto	on.forbes@nts.com
DATE: 04/0	05/2023





04/05/2023 OSP-0196 Page 2 of 11



DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION FACILITIES DEVELOPMENT DIVISION

Seismic Parameters							
Design Basis of Equipment or Components (Fp/Wp) = 1.40							
SDS (Design spectral response acceleration at short period, g) = 1.86							
ap (Amplification factor) =	2.5						
R _P (Response modification factor) =	6						
Ω_0 (System overstrength factor) =	2.0						
Ip (Importance factor) =	1.5						
z/h (Height ratio factor) = 1 and 0							
Natural frequencies (Hz) = See Attachment							
Overall dimensions and weight =	See Attachment						

HCAI Approval (For Office Use Only) - Approval Expires on 04/05/2029						
Date:	4/5/2023	OSP-0196	16			
Name:	Mohammad Karim		Title:	Supervisor, Health Facilities		
Special	Seismic Certification Valid Up to: SDS (g) = 1.86	z/h =	1 and 0		
Conditio	n of Approval (if applicable):	OATF: 04/05/2023				





04/05/2023 OSP-0196 Page 3 of 11



SPECIAL SEISMIC CERTIFICATION CERTIFIED COMPONENTS

Pre No. 231307

Manufacturer: APC by Schneider Electric Product Type: Uninterruptible Power Supply

Model Line: Symmetra LX

Seismic Parameters

Building Codes

 $S_{DS} = 1.86g \text{ for z/h=1}$

 $S_{DS} = 1.86g \text{ for z/h=0}$

 $I_p = 1.5$

CBC 2022

TABLE 1

Mounting Configuration: Base Mounted - Rigid

Construction Summary

NEMA 1 - 14 guage cold rolled carbon steel (ASTM A1008)

Options Summary

Seismic enclosure populated with subcomponents from Tables 2 or 3.

Model Line	Model		Dimensio		Wt.	C.G. Ht.	Notes	UUT
		D	W	H	((b) 600	(in) 26		Intorn
APC NetShelter VX			Y Yank		600	20		Interp.
Seismic 42U Enclosure	AR2145BLK	42.2	23.0	80.3	835	26		2
(Seismic)	74/	(2.2	23.0 DSP-()196				Interp.
					1650	37		1
	I O III E	BY: Mo	hamn	nad Ka	rim			
		22222111111						
		ATE	. 04/0	5/202	2	\mathbb{V}_{α}		
	7		. 07/0	01202				
			+		HARB.	2		
	(0)							-
	7	17		ANN	COY			-
		1 B	UTIE	MING				
			OILL	11				
								-

Pre Compliance www.go-pre.com (541) 241-2310

04/05/2023 OSP-0196 Page 4 of 11



SPECIAL SEISMIC CERTIFICATION **CERTIFIED SUBCOMPONENTS**

Pre No. 231307

Manufacturer: APC by Schneider Electric Product Type:

Uninterruptible Power Supply

Model Line: Symmetra LX Seismic Parameters

Building Codes

 $S_{DS} = 1.86g \text{ for z/h=1}$

 $S_{DS} = 1.86g \text{ for z/h=0}$

 $I_p = 1.5$

CBC 2022

Table Description: UPS Modules (10 battery)

Component	Model	Dim	nensions	(in)	Wt.	Notes	UUT
(Manufacturer)		D	W	Н	(lb)		
	SYA4K8RMP	27.1	18.6	22.5.	295	4kVA scalable to 8kVA N+1	1
Symmetra LX UPS	SYA8K8RMP	27.1	18.6	22.5	392	8kVA scalable to 8kVA N+1	Interp.
208/240V	SYA8K16RMP	27.1	R 18.6	32.9	437	8kVA scalable to 16kVA N+1	Interp.
(APC)	SYA12K16RMP	27.1	18.6	32.9	534	12kVA scalable to 16kVA N+1	Interp.
	SYA16K16RMP	27.1	18.6	32.9	665	16kVA scalable to 16kVA N+1	2
	14/					7	
				VVXXXXXXXXX	XXXXXXXXXXXX	3	
			DSP-(0196			
		BY: M	ohamn	nad Ka	arim 👢		
		10.000.000.00					
		ATE	. 04/0	5/202	2		
		PAIL	. 04/0	001202			
			+		HHHH	201	
				AMA	MAN (
	P			Z MM			
		VIA		NIV	CO		
			DILL	JING			

Pre Compliance (541) 241-2310 www.go-pre.com



SPECIAL SEISMIC CERTIFICATION **CERTIFIED SUBCOMPONENTS**

 $I_p = 1.5$

Pre No. 231307

Manufacturer: APC by Schneider Electric Product Type:

Uninterruptible Power Supply

Model Line: Symmetra LX Seismic Parameters

 $S_{DS} = 1.86g \text{ for z/h=1}$

 $S_{DS} = 1.86g \text{ for z/h=0}$

Building Codes

CBC 2022

TABLE 3

Table Description: Batteries

Component	Manufacturer	Manufacturer Model #	APC Model #	Dim D	ensions W	(in) H	Wt. (lb)	UUT
	CSB Battery	HR1234WF2		5.94	2.56	3.7	5.7	1,2
10 Battery Module (APC no. SYBT5)	Kung Long Batteries Industrial Co., LTD	WP1234W	910-1209-003	5.94	2.56	3.7	5.7	2
	E-Power Trading Limited (B&B Battery Co.)	HR1234W		5.94	2.56	3.7	5.7	2
		OSP-(0196	m				
		BY: Mohamm	nad Karim	0				
	C	ATE: 04/0	05/2023	N/				
				5/				
	P	VIA BITTE	TNGCOOY					
		OILL						

Pre Compliance (541) 241-2310 www.go-pre.com

04/05/2023 OSP-0196 Page 6 of 11



SPECIAL SEISMIC CERTIFICATION TESTING SUMMARY

Pre No. 231307

UT	Model	Test Report	Test Laboratory	S _{DS} ¹	z/h	I,
1	4kVA UPS in AR2145BLK Rack	TR63570-12I-RCK2b&6 (Rack 6)	NTS Acton	1.86 1.86	1	1.
2	16kVA UPS in AR2145BLK Rack	TR-303808-09I (UUT 1)	NTS Boxborough	1.86 1.86	1 0	1.
		FOR CODE C	01.			
			MAR			
		OSP-0196	F			
	Q					
	0	BY: Mohammad Ka	rim			
	\	DATE: 04/05/202	23			
			2			
		PNIARIUS	CODY			
		BUILDING				

Pre Compliance www.go-pre.com (541) 241-2310



Pre No. 231307

Test Report# TR63570-12I-RCK2b&6

Manufacturer: APC by Schneider Electric

Model Line: Symmetra LX

Model Number: 4kVA UPS in AR2145BLK Rack

Serial Number: N/A **Highest Passed Test Level**

 S_{DS} z/h I_p A_{riq-h} $A_{\text{flx-v}}$ $A_{\text{rig-v}}$ A_{flx-h}

1.86 1 1.5 2.98 2.23 1.25 0.5 0

Dimensions/Weights

Depth (in) Width (in) Height (in) Weight (lbs.) 42.2 23.0 80.3 1650

Lowest Natural Frequency (Hz)

Front-Back Side-Side Vertical 6.91 4.08 >33.3

Building Code

CBC 2022

Test Criteria

ICC-ES AC156

Construction/Option Summary

List of Included Subcomponents

NEMA 1 - 14 guage cold rolled carbon steel (ASTM

A1008)

1.86

UUT Mounting Details: SYSTEM BY: Moham

UUT was rigid base mounted using (8) M12 8.8x30 bolts.

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

0106	<u>'</u>
Description	Model #
mad Smart UPS RT 1500VA	SURTA1500RMKL2U
Smart UPS RT 3000VA	SURTD3000RMXLT3U
Smart UPS RT 8000VA	SURT8000RMXLT6U
Smart UPS RT 20kVA RM	SURT20KRMXLT
Symmetra LX 4kVA	SYA4K8RMP
4-Battery Module (911-0041A)	CP1290
	HR1221WF2
8-Battery Module (OM-1863B)	WP5-12
DING	BP5-12
8-Battery Module (OM-1863B)	HR1221WF2
8-Battery Module (OM-1863B)	HR1221WF2
	HR1234WF2
10-Battery Module (SYBT5)	WP1234W
	HR1234W

Pre Compliance (541) 241-2310 www.go-pre.com



UUT 1

Test Report# TR63570-12I-RCK2b&6

Test Configuration

Center of Gravity Height: 37"

	42	SURTA1500RMXL2U UPS	42
	41	30KTAI300KWIXE20 0F3	41
	40	COD	40
	39	ORLUDEC	39
	38		38
	37		37
	36		36
	35		35
1	34		34
7	/33	SURTOSOPORMXUTSU UPS	33
4	32	/A	32
	31		31
	30 29	BY: Mohammad Karim	30 29
	29	SURT8000RMXLT6U UPS	29
	27		27
	26	DATE: 04/05/2023	26
7	25		25
1	24	WALLEY + WALLEY CO.	24
	23		23
	22		22
	21	SURT20KRMXLT UPS SURT192RMXLBP2	21
	20	SURT20KRMXLT UPS	20
	19	SURT192RMXLBP2	19
	18 17		18 17
	16		16
	15		15
	14		14
	13		13
	12		12
	11		11
	10		10
	9		9
	8		8
	7	SYA4K8RMP UPS	7
	6		6
	5		5
	4		4
	3		3
	2		2
	1		1



Pre No. 231307

Test Report# TR-303808-091

Manufacturer: APC by Schneider Electric

Model Line: Symmetra LX

Model Number: 16kVA UPS in AR2145BLK Rack

Serial Number: N/A **Highest Passed Test Level**

 S_{DS} z/h I_p A_{riq-h} $A_{\text{flx-v}}$ $A_{\text{rig-v}}$ A_{flx-h}

1.86 1 1.5 2.98 2.23 1.25 0.5

0 1.86

Description

10 Battery Module (SYBT5)

Model#

SY164K16RMP

HR1234WF2

Dimensions/Weights

Depth (in) Width (in) Height (in) Weight (lbs.) 42.2 23.0 80.3

835

Lowest Natural Frequency (Hz)

Front-Back Side-Side Vertical 16.79 8.55 21.91

Building Code

CBC 2022

Test Criteria

ICC-ES AC156

Construction/Option Summary

List of Included Subcomponents

NEMA 1 - 14 guage cold rolled carbon steel (ASTM

A1008)



UUT was rigid base mounted using (8) M12 8.8x30 bolts.

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

Pre Compliance (541) 241-2310 www.go-pre.com



UUT 2

Test Report# TR-303808-091

Test Configuration

Center of Gravity Height: 26"

