



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-0913

HCAI Special Seismic Certification Preapproval (OSP)

Type: ☒ New ☐ Renewal

Manufacturer Information

Manufacturer: Enersys Delaware Inc.

Manufacturer's Technical Representative: Fang Pan

Mailing Address: P.O. B0x 14145, 2366 Bernville Road, Reading, PA 19605

Telephone: (302) 757-2241 Email: fang.pan@enersys.com

Product Information

Product Name: Rechargeable Lithium-Ion Battery

Product Model Number(s): Varies. See Attachment

Product Category: UPS and Batteries

Product Sub-Category: Batteries

General Description: Lithium-Ion Battery System

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 & Program Manager



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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: CHINA TELECOMMUNICATION TECHNOLOGY LABS (CTTL)

Contact Person: Ying Deng

Mailing Address: No.52 Huayuan Beiroad, Haidian District, Beijing, China

Telephone: +86 138 1090 9918

Email: dengying1@caict.ac.cn

BY: Mohammad Karim

DATE: 08/04/2026



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Seismic Parameters

Certified Response Spectral Acceleration Factors: (F_p/W_p)

Horizontal (A Flx-H), $g =$ 2.40 (A Rig-H), $g =$ 1.61

Vertical (A Flx-V), $g =$ 1.00 (A Rig-V), $g =$ 0.40

SDS (Design spectral response acceleration at short period, g) = 1.50

H_f (Force amplification height factor) = 1 @ $z/h = 0$; 3.5 @ $z/h = 1$

R_u (Structure ductility reduction factor) = 1 @ $z/h = 0$; 1.3 @ $z/h = 1$

I_p (Importance factor) = 1.5

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

HCAI Approval (For Office Use Only) - Approval Expires on 08/04/2032

Date: 8/4/2026

Name: Mohammad Karim

Title: Supervisor, Health Facilities

Condition of Approval (if applicable):

OSP-0913

BY: Mohammad Karim

DATE: 08/04/2026



Manufacturer: Energysys Delaware, Inc.
Product Type: Batteries
Model Line: Rechargeable Lithium-Ion Battery

$S_{DS} = 1.5g$ for	$z/h=1, R_\mu=1.3, H_f=3.5$	$I_p=1.5$
$S_{DS} = 1.5g$ for	$z/h=0, R_\mu=1.0, H_f=1.0$	

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Mounting Configuration: Base Mounted - Rigid

Options Summary

Models separated by "/" in each row are identical,
numbering differs by application/customer.
51.2V to 716.8V

Pre Compliance www.go-pre.com (541) 241-2310
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SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENTS

Manufacturer: Enersys Delaware, Inc.
Product Type: Batteries
Model Line: Rechargeable Lithium-Ion Battery

Seismic Parameters
 $S_{DS} = 1.5g$ for $z/h=1, R_{\mu}=1.3, H_f=3.5$
 $S_{DS} = 1.5g$ for $z/h=0, R_{\mu}=1.0, H_f=1.0$ $I_p=1.5$

Building Codes
CBC 2025

TABLE 2

Table Description: Electrical Components

Component (Manufacturer)	Model	Description	Notes	UUT
Cell (Shenzhen Center Power Tech.Co., Ltd.)	MP36130160LFP-60Ah10C	3.2Vdc, 60Ah, LFP		1,2
PCB (Shenzhen Xinhongxing Multilayer PCB Co., Ltd.)	XHX-M1	V-0, 130°C		1,2
HV Box (Shenzhen Center Power Tech.Co., Ltd.)	LUF16S12D1000AD0	Material: SPCC; Minimum thickness:1.2mm 708.0mmW× 603.3mmD×478.9mmH		1,2
Fan (Shenzhen Runda Electronic Co., Ltd.)	RD6025B48H -RS	48Vdc, 0.08A		1,2
Fuse (Eaton)	170M5500	900V, 1000A		1,2
DCDC (ATAZ Guangzhou Science & Technology Co., Ltd.)	HV350-15DB24LV	200-1500V, .350W		1,2
Hal (Mornsun Guangzhou Science & Technology Co., Ltd.)	TL01-D1CZHY	100mA, DC+12V, 25~+85°C		1,2
AC Power Connector (Ningbo Haishu Lihe Electronic Co., Ltd.)	LZ-14	250Vac,10A, -40°C~+85°C		1,2
MCCB (LS)	TS1250N 1250A 4PTM	750V, 1250A		1,2
Contactors (Suzhou ALQ Electronic Technology Co., Ltd.)	EVH9AX	800V, 1000A		1,2



SPECIAL SEISMIC CERTIFICATION TESTING SUMMARY

SPECIAL SEISMIC CERTIFICATION UUT SUMMARY

UUT 1

Test Report# 26T04X800511-001

Manufacturer: Enersys Delaware, Inc.
Model Line: Rechargeable Lithium-Ion Battery
Model Number: TPX450
Serial Number: N/A

Highest Passed Test Level

S _{DS}	z/h	R _μ	H _f	I _p	A _{flx-h}	A _{rig-h}	A _{flx-v}	A _{rig-v}
1.50	1.0	1.3	3.5	1.5	2.40	1.61	1.0	0.4
1.50	0.0	1.0	1.0					

Dimensions/Weights

Depth (in)	Width (in)	Height (in)	Weight (lbs.)
31.5	29.5	78.7	1878

Lowest Natural Frequency (Hz)

Front-Back	Side-Side	Vertical
5.86	4.10	16.99

Building Codes

CBC 2025

Test Criteria

ICC-ES AC156-24

Construction/Option Summary

Welded carbon steel enclosure

UUT Mounting Details:



List of Included Subcomponents

Description (Manufacturer)	Model #
Cell (Shenzhen Center Power Tech.Co., Ltd.)	MP36130160LFP-60Ah10C
PCB (Shenzhen Xinhongxing Multilayer PCB Co., Ltd.)	XHX-M1
HV Box (Shenzhen Center Power Tech.Co., Ltd.)	LUF16S12D1000AD0
Fan (Shenzhen Runda Electronic Co., Ltd.)	RD6025B48H -RS
Fuse (Eaton)	170M5500
DCDC (ATAZ Guangzhou Science & Technology Co., Ltd.)	HV350-15DB24LV
Hal (Mornsun Guangzhou Science & Technology Co., Ltd.)	TL01-D1CZHY
AC Power Connector (Ningbo Haishu Lihe Electronic Co., Ltd.)	LZ-14
MCCB (LS)	TS1250N 1250A 4PTM
Contactora (Suzhou ALQ Electronic Technology Co., Ltd.)	EVH9AX

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

SPECIAL SEISMIC CERTIFICATION UUT SUMMARY

UUT 2

Test Report# 26T04X800510-001

Manufacturer: Enersys Delaware, Inc.
Model Line: Rechargeable Lithium-Ion Battery
Model Number: TP280PRO
Serial Number: N/A

Highest Passed Test Level

S _{DS}	z/h	R _μ	H _f	I _p	A _{flx-h}	A _{rig-h}	A _{flx-v}	A _{rig-v}
1.50	1.0	1.3	3.5	1.5	2.40	1.61	1.0	0.4
1.50	0.0	1.0	1.0					

Dimensions/Weights

Depth (in)	Width (in)	Height (in)	Weight (lbs.)
31.5	29.5	78.7	2571

Lowest Natural Frequency (Hz)

Front-Back	Side-Side	Vertical
5.08	2.73	14.84

Building Codes

CBC 2025

Test Criteria

ICC-ES AC156-24

Construction/Option Summary

Welded carbon steel enclosure

UUT Mounting Details:



List of Included Subcomponents

Description (Manufacturer)	Model #
Cell (Shenzhen Center Power Tech.Co., Ltd.)	MP36130160LFP-60Ah10C
PCB (Shenzhen Xinhongxing Multilayer PCB Co., Ltd.)	XHX-M1
HV Box (Shenzhen Center Power Tech.Co., Ltd.)	LUF16S12D1000AD0
Fan (Shenzhen Runda Electronic Co., Ltd.)	RD6025B48H -RS
Fuse (Eaton)	170M5500
DCDC (ATAZ Guangzhou Science & Technology Co., Ltd.)	HV350-15DB24LV
Hal (Mornsun Guangzhou Science & Technology Co., Ltd.)	TL01-D1CZHY
AC Power Connector (Ningbo Haishu Lihe Electronic Co., Ltd.)	LZ-14
MCCB (LS)	TS1250N 1250A 4PTM
Contactora (Suzhou ALQ Electronic Technology Co., Ltd.)	EVH9AX

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