

DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION FACILITIES DEVELOPMENT DIVISION

APPLICATION FOR HCAI SPECIAL SEISMIC	OFFICE USE ONLY
CERTIFICATION PREAPPROVAL (OSP)	APPLICATION #: OSP-0749
HCAI Special Seismic Certification Preapproval (OSP)	
Type: X New Renewal	
Manufacturer Information	
Manufacturer: NXT Power	
Manufacturer's Technical Representative: Cherian Jose	
Mailing Address: 7051 W. Wilson Ave, Norridge, IL 60706	
Telephone: (312) 310-0894 Email: cherian.jose@nxt	tpower.com
Product Information	1D,
Product Name: UPS and Batteries	1
Product Type: UPS	
Product Model Number: See Attachment	in in
General Description: Uninterruptible Power Supply, 120VAC 50/60Hz, wi	ith isolation transformer and internal batteries.
Mounting Description: Rigid, Floor Mounted	
Tested Seismic Enhancements: None DATE: 10/03/2022	10
Applicant Information	2
Applicant Company Name: Dynamic Certification Laboratories	
Contact Person: Kelly Laplace	
Mailing Address: 1315 Greg Pkwy # 109, Sparks, NV 89431	
Telephone: (775) 358-5085 Email: kelly@shaketest.	com
Title: Business Manager	





DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION FACILITIES DEVELOPMENT DIVISION

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 X ICC-ES AC156 IEEE 344 IEEE 693	NEBS 3
Other (Please Specify):	
FOR CODE CO	
Testing Laboratory	
Company Name: DYNAMIC CERTIFICATION LABORATORY (DCL)	
Contact Person: Kelly Laplace	
Mailing Address: 1315 Greg St., Ste 109, Sparks NV 89431	
Telephone: (775) 358-5085 Email: Kelly@shaketest.com	
C DATE: 10/03/2022	
DATE: 10/03/2022	
TUINE	
BUILDING	

"Access to Safe, Quality Healthcare Environments that Meet California's Diverse and Dynamic Needs"





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Seismic Parameters

Design Basis of Equipment or Components	(Fp/Wp) = 1.44 (Sds 2.0g, z/h=1);	1.13 (Sds 2	2.5g, z/h=0)
SDS (Design spectral response accele	eration at short period, g) = $Sds 2.0g$,	, z/h=1; Sd	s 2.5g, z/h=0
ap (Amplification factor) =	1.0		
Rp (Response modification factor) =	2.5		
Ω_0 (System overstrength factor) =	2.0		
lp (Importance factor) =	1.5		
z/h (Height ratio factor) =	1 and 0		
Natural frequencies (Hz) =	See Attachment		
Overall dimensions and weight =	See Attachment		
	JED FOR MA	4	
HCAI Approval (For Office Use Only)	Approval Expires on 10/03/2028	12	
Date: 10/3/2022	OSP-0749	F	
Name: Mohammad Karim	DV. Mahammad Karim	Title:	Supervisor, Health Facilities
Special Seismic Certification Valid Up to: Sp	os (g) = See Above	z/h =	See Above
Condition of Approval (if applicable):	DATE: 10/03/2022	M O	
	PRVIA BUILDING COD	5.201	

"Access to Safe, Quality Healthcare Environments that Meet California's Diverse and Dynamic Needs"



Special Seismic Certification

Table 1 - Certified Components

DCL Project Number: 02401-2201

Certified Seismic Level: Sds=2.0, z/h=1.0; Sds=2.5, z/h=0.0

Product Type: Uninterruptable Power Supply (UPS)

Product Line: Integrity Pro, Integrity Max R/T

Mounting Description: Rigid Base Mount with Cam Straps or Metal Band

Model Number		Max. Dimensions (in)		Max. Weight	Mounting	Unit	
woder Number	Depth	Width	Height	(lb)	wounting	Unit	
NPTU600-LM-N	17.9	11.3	9.3	56		Same as UUT-01	
NPTU600-L-N	17.9	11.3	9.3	56		Same as UUT-01	
NPTU800-LM-N	17.9	11.3	9.3	56	Rigid Base Mount with	Same as UUT-01	
NPTU800-L-N	17.9	11.3	9.3	56		UUT-01	
NPTU1100-LM-N 20.9	20.9	13.3	10.0	96 Cam Straps	Cam Straps	Same as UUT-02	
NPTU1100-L-N	20.9	13.3	10.0	96]	Same as UUT-02	
NPTU1500-LM-N	20.9	13.3	10.0	96		Same as UUT-02	
NPTU1500-L-N	20.9	13.3	10.0	96		UUT-02	
NPTU800-OR-N	27.5	8.3	17.5	80		Same as UUT-03	
NPTU1100-OR-N	27.5	8.3 SP_(7/0 17.5	80	-	Same as UUT-03	
NPTU1500-OR-N	27.5	8.3	17.5	80		UUT-03	
	NPTU600-L-N NPTU800-LM-N NPTU100-L-N NPTU1100-LM-N NPTU1500-LM-N NPTU1500-LM-N NPTU1500-LN NPTU1500-LN NPTU1500-LN NPTU1500-LN NPTU1500-LN NPTU1500-LN	Depth NPTU600-LM-N 17.9 NPTU600-L-N 17.9 NPTU800-LM-N 17.9 NPTU800-L-N 17.9 NPTU800-L-N 17.9 NPTU100-L-N 20.9 NPTU1100-L-N 20.9 NPTU1500-L-N 27.5 NPTU1100-OR-N 27.5	Model Number Depth Width NPTU600-LM-N 17.9 11.3 NPTU600-L-N 17.9 11.3 NPTU800-LM-N 17.9 11.3 NPTU800-LM-N 17.9 11.3 NPTU800-L-N 17.9 11.3 NPTU800-L-N 17.9 11.3 NPTU100-L-N 20.9 13.3 NPTU1100-L-N 20.9 13.3 NPTU1500-L-N 20.9 13.3 NPTU100-OR-N 27.5 8.3	Model Number Depth Width Height NPTU600-LM-N 17.9 11.3 9.3 NPTU600-L-N 17.9 11.3 9.3 NPTU800-L-N 17.9 11.3 9.3 NPTU800-L-N 17.9 11.3 9.3 NPTU800-L-N 17.9 11.3 9.3 NPTU100-L-N 20.9 13.3 10.0 NPTU1100-L-N 20.9 13.3 10.0 NPTU1500-L-N 20.9 13.3 10.0 NPTU800-OR-N 27.5 8.3 17.5 NPTU1100-OR-N 27.5 8.3 17.5	Model Number Depth Width Height (lb) NPTU600-LM-N 17.9 11.3 9.3 56 NPTU600-L-N 17.9 11.3 9.3 56 NPTU800-LM-N 17.9 11.3 9.3 56 NPTU800-LM-N 17.9 11.3 9.3 56 NPTU800-L-N 17.9 11.3 9.3 56 NPTU800-L-N 17.9 11.3 9.3 56 NPTU100-L-N 20.9 13.3 10.0 96 NPTU1100-L-N 20.9 13.3 10.0 96 NPTU1500-L-N 20.9 13.3 10.0 96 NPTU1500-L-N 20.9 13.3 10.0 96 NPTU1500-L-N 20.9 13.3 10.0 96 NPTU800-OR-N 27.5 8.3 17.5 80	Model Number Depth Width Height (lb) Mounting NPTU600-LM-N 17.9 11.3 9.3 56 NPTU600-L-N 17.9 11.3 9.3 56 NPTU800-L-N 17.9 11.3 9.3 56 NPTU100-L-N 20.9 13.3 10.0 96 NPTU1100-L-N 20.9 13.3 10.0 96 NPTU1500-L-N 20.9 13.3 10.0 96 NPTU1500-L-N 20.9 13.3 10.0 96 NPTU1500-L-N 20.9 13.3 10.0 96 NPTU800-OR-N 27.5 8.3 17.5 80 Rigid Base Mount with Metal Band NPTU1100-OR-N 27.5 8.3 17.5 80 Metal Band	

Notes:

1. LM and L products are equivalent in the Integrity Pro line for their subsequent power rating, M is added to nomenclature for marketing purposes.

2. NPTU600-LM/L-N and NTPU800-LM/L-N in the Integrity Pro line only have a rating label difference. NPTU1100-LM/L-N and NTPU1500-LM/L-N in the Integrity Pro line only have a rating label difference.

3. The units in the Integrity Max R/T line only have a rating label difference.





pecial Seismic Certi able 2 - Certified Op DCL Project Number	otions - Nomenclature Chart		(()) DCL DYNAMIC CERTIFICATION LABORATORIES,LLC
Certified Seismic Level	: Sds=2.0, z/h=1.0; Sds=2.5, z/h=0.0		
Product Type	: Uninterruptable Power Supply (UPS)		
Product Line	: Integrity Pro, Integrity Max R/T		
Example Model Number	ABCD-XXXX-EF/E-G		
Example Value	Allowable Values	Definition	Unit
ABCD	NPTU	NXT Power Transformer UPS	UUT-01, UUT-02, UUT-03
	600	OR CODE CO	Same as UUT-01
XXXX ^{1,2}	800	Power, measured in volt-ampheres (VA)	UUT-01
XXXX	1100		Same as UUT-02 or UUT-03
	1500		UUT-02, UUT-03
	OR	Online Rackmount	UUT-03
EF ³	L	Line Interactive	UUT-01, UUT-02
	М	OSP-0749 Medical	Same as UUT-01 and UUT-02
G	N	North America	UUT-01, UUT-02, UUT-03

1. Model with XXXX value of 800 is only equivalent to the 1500 model in the Integrity Max R/T line.

2. Models with XXXX value of 1100 are equivalent to the 1500 model for both product lines.

3. LM and L products are equivalent in the Integrity Pro line for the subsequent power rating, M is added to nomenclature for marketing purposes.

ecial Seismic Certification ble 3 - Certified Subcomponer	nts - Integrity Pro Line				
DCL Project Number: 024	401-2201				TIFICATION RATORIES,LLC
	s=2.0, z/h=1.0; Sds=2.5, z/h=0.	0			
	interruptable Power Supply (U				
Product Line: Int		- /			
	gid Base Mount with Cam Strap	s			
	· · ·	Enclosures			
Manufacturer Model Number	Manufacturer	Description	Material	Weight (lb)	Unit
NPTU800-L-N-ENC	Ablerex	16.7" L x 7.1" W x 9.3" H, NEMA 1	Carbon Steel	10.7	UUT-01
NPTU1500-L-N-ENC	Ablerex	19.7" L x 8.7" W x 9.8" H, NEMA 1	Carbon Steel	13.9	UUT-02
			- VA		
		Boards			
Manufacturer Model Number	Manufacturer	Description	Material	Weight (lb)	Unit
800 PRO Power PCBA	Ablerex	Main power 390 x 150 x 2.0 mm	94-V0 Fiberglass	1.8	UUT-01
1500 PRO Power PCBA	Ablerex	Main power PCBA	94-V0 Fiberglass	2.1	UUT-02
		2 USP-07	49		
		Fans			
Manufacturer Model Number	Manufacturer	Description	Material	Weight (lb)	Unit
DFB802512H	Suzhou Kingmot	R 80 x 25 mmhammac	KarPlastic, Copper, Lamination Steel	<0.1	UUT-01
YDH8025B12	Shenzhen YCC Fan	80 x 25 mm	Plastic, Copper, Lamination Steel	<0.1	UUT-02
DFS602012M	YoungLin	60 x 20 mm	Plastic, Copper, Lamination Steel	<0.1	UUT-02
		Fuses, Breakers, Trips, and			
Manufacturer Model Number	Manufacturer	Description	Material	Weight (lb)	Unit
UDE-A	Conquer	4A, 500V	Carbon, Copper, Epoxy	<0.1	UUT-01
L1-15A	Topstone	15A, 250V	Plastic and Tinned Copper	<0.1	UUT-01
Type 257	Littelfuse	32A, 40V	Plastic and Tinned Copper	<0.1	UUT-01
MST 002	Conquer	2A, 250V	Ceramic, Copper	<0.1	UUT-01, UUT-0
MST 004	Conquer	4A, 250V	Ceramic, Copper	<0.1	UUT-02
L1-20A	Topstone	20A, 250V	Plastic, Tinned Copper	<0.1	UUT-02
Туре 314	Littelfuse	30A, 125V	Ceramic, Glass, Tinned Copper	<0.1	UUT-02
·			• •		
		Batteries and Battery Acc	essories		
Manufacturer Model Number	Manufacturer	Description	Material	Weight (lb)	Unit
HR1234	CSB	12V 34W VRLA Battery	ABS, Lead, Acid	5.8	UUT-01, UUT-0
		Transformers			
Manufacturer Model Number	Manufacturer	Description	Material	Weight (lb)	Unit
TX1 800	Ablerex	Output Isolation	Silicon Steel, Copper, Polyethylene Bobbin	25.6	UUT-01
TX1 1500	Ablerex	Output Isolation	Silicon Steel, Copper, Polyethylene Bobbin	47.2	UUT-02
					
Manufactures Madel Musel and	Manufacture	Display	Matarial	Mainte (III)	11
Manufacturer Model Number PC-540	Manufacturer Chi Mei	Description 180 x 25 x 232 mm	Material	Weight (lb)	Unit

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Special Seismic Certification Table 4 - Certified Subcompone	(()) DCL				
DCL Project Number: 024	401-2201				
, ,	s=2.0, z/h=1.0; Sds=2.5, z/h=0.	0			
	interruptable Power Supply (L				
Product Line: Int		,			
	id Base Mount with Metal Bar	nd			
		Enclosures			
Manufacturer Model Number	Manufacturer	Description	Material	Weight (lb)	Unit
NPTU1500-OR-N-ENC	Ablerex	26.6" L x 3.3" W x 17.3" H, NEMA 1	Carbon Steel	15.8	UUT-03
		CORCODE			
		Boards			
Manufacturer Model Number	Manufacturer	Description	Material	Weight (lb)	Unit
1500 RT Power PCBA	Ablerex	Main power 320 x 235 x2.0 mm	94-V0 Fiberglass	8.3	UUT-03
1500 RT Filter PCBA	Ablerex	Filter PCB 102x60x2.0 mm	94-V0 Fiberglass	0.3	UUT-03
1500 KT HILCH YEBA	ADICICA		J4-V0 Hibergiass	0.5	00103
		OSP _{Fans} 749	S		
Manufacturer Model Number	Manufacturer	Description	Material	Weight (lb)	Unit
DFB802512H	Suzhou Kingmot	80x25mm	Plastic, Copper, Lamination Steel	<0.1	UUT-03
		BY: Mohammad Ka		.0.1	
		Fuses, Breakers, Trips, and A	ccessories		
Manufacturer Model Number	Manufacturer	Description	Material	Weight (lb)	Unit
L1-20A	Topstone	DA 20A, 250V 0/03/20	22 Plastic, Tinned copper	<0.1	UUT-03
ADA	Conquer	20A, 250V	Ceramic, Plated brass	<0.1	UUT-03
MST 003	Conquer	3A, 250V	Glass, Tinned copper	<0.1	UUT-03
Туре 314	Littelfuse	30A, 120V	Ceramic, Plated brass	<0.1	UUT-03
··· · ·					
		Batteries and Battery Acce	ssories		
Manufacturer Model Number	Manufacturer	Description	Material	Weight (lb)	Unit
NPW45-12	Yuasa	12V, 45W, VRLA Battery	ABS, Lead, Acid	5.7	UUT-03
HR12134	CSB	12V, 34W, VRLA Battery	ABS, Lead, Acid	5.8	UUT-03
		Transformers			
Manufacturer Model Number	Manufacturer	Description	Material	Weight (lb)	Unit
TX1 15000L	Ablerex	Output Isolation	Silicon Steel, Copper, Polyethylene Bobbin	45.4	UUT-03
		Display			
Manufacturer Model Number	Manufacturer	Description	Material	Weight (lb)	
PC-540	Chi Mei	180 x 25 mm LCD	94-V0 Fiberglass and LCD	0.5	UUT-03

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Special Seismic Certifi	cation				
Table 5 - Tested Units		((-))	DCL		
DCL Project Number: 02	401-2201		CERTIFICATION		
Certified Seismic Level: Sd	s=2.0, z/h=1.0; Sds=2.5,	, z/h=0.0			
Product Type: Ur	ninterruptable Power Su	ipply (UPS)			
Product Line: In	tegrity Pro, Integrity Ma	IX B/DR CODE CO			
Mounting Description: Ri	gid Base Mount with Ca	m Straps or Metal Band	10,		
Model Number		Dimensions (in)		Weight (lb)	Unit
	Depth	Width	Height		Unit
NPTU800-L-N	17.94	OSP13749	9.3	56	UUT-01
NPTU1500-L-N	20.9	13.3	10.0	96	UUT-02
NPTU1500-OR-N	27.5	Mohamad Karim	17.5	80	UUT-03



UUT-01 UNIT UNDER TEST (UUT) Summary Sheet



DCL Project Number:

NXT Power Manufacturer:

Product Line: **Integrity Pro**

Model Number: NPTU800-L-N

Product Construction Summary: Powder Coated Carbon Steel

02401-2201

Options / Component Summary:

Uninterruptible Power Supply (UPS) with display, fan, fuses, overload protectors, batteries, cam straps, transformer, and a rigid mounting bracket.

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.

			UU	T Properti	es			
Operating Weight		Dimensio	ns (inche	s) DF		Lowest Natural Frequency (Hz)		
(lb)	Depth	Wic	Width Height		Front-Back	Side-Side	Vertical	
56	17.9	11	.3	9.3		29.0	>33.3	>33.3
	5		Seismic	Test Para	meters	4		
Building Code	Test Crit <mark>er</mark> ia	Sds (g)	z/h	Ір	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)
CBC 2022 ICC-ES AC156	2.00	1.05	P-07	49 _{3.20}	2 22	4.67	0.67	
	ICC-ES ACIS	2.50	0.0	с.т С.Т		2.40	1.67	0.67
II I AA	XXX	XX						-

Unit Mounting Description:

Unit Mounting Description: UUT-01 was rigidly base-mounted to the steel shake table interface plate with (6) 3/8" grade 5 bolts and washers. The UPS unit was attached to the rigid mounting bracket (Part 001-00089-01-FNL) with (2) cam straps (Part 018-00076). The rigid mounting bracket was made with 0.1" thick steel having a width of 11.3" and depth of 17.9" while featuring 0.8" tall flanges along the sides in the Y-direction. Both cam straps had a width of 1", length of 87", utility polyester construction, breaking strength of 3,585 pounds, and were spaced 12.8" in the Y-direction. The steel shake table interface plate was attached to the shake table with M12 threaded rods.



Overall view of UUT-01

UUT-02 UNIT UNDER TEST (UUT) Summary Sheet



DCL Project Number:

NXT Power Manufacturer:

Product Line: **Integrity Pro**

NPTU1500-L-N Model Number:

Product Construction Summary: Powder Coated Carbon Steel

02401-2201

Options / Component Summary:

Uninterruptible Power Supply (UPS) with display, fan, fuses, overload protectors, batteries, CAM straps, transformer, and a rigid mounting bracket.

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.

		001	r Propert	ies			
	Dimensio	ns (inche	s) D I		Lowest	Natural Freque	ncy (Hz)
Depth	Wid	Width Height		Front-Back	Side-Side	Vertical	
20.9	13.	.3	10.0		22.0	>33.3	>33.3
5	5	Seismic	Test Para	meters	4		
Test Criteria	Sds (g)	z/h	lp	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)
CBC 2022 ICC-ES AC156	2.00	1.05	P-07	49,20	2 40	1.67	0.67
	2.50	0.0	1.5	- 5.20	2.40		
	20.9 Test Criteria	Depth Wid 20.9 13 Test Criteria Sds (g) ICC-ES AC156 2.00	Dimensions (incher Depth Width 20.9 13.3 Seismic Test Criteria Sds (g) z/h ICC-ES AC156	Depth Width 20.9 13.3 Seismic Test Para Test Criteria Sds (g) z/h Ip ICC-ES AC156 1.0 -1.5	Depth Width Height 20.9 13.3 10.0 Seismic Test Parameters Test Criteria Sds (g) z/h Ip Aflx-H (g) ICC-ES AC156 2.00 1.0 -1.5 3.20	Dimensions (inches) Lowest Depth Width Height Front-Back 20.9 13.3 10.0 22.0 Seismic Test Parameters Test Criteria Sds (g) z/h Ip Aflx-H (g) Arig-H (g) ICC-ES AC156 2.00 1.0 -1.5 3.20 2.40	Dimensions (inches) Lowest Natural Frequence Depth Width Height Front-Back Side-Side 20.9 13.3 10.0 22.0 >33.3 Seismic Test Parameters Test Criteria Sds (g) z/h Ip Aflx-H (g) Arig-H (g) Aflx-V (g) ICC-ES AC156 2.00 1.0 -1.5 3.20 2.40 1.67

Unit Mounting Description:

Unit Mounting Description: UUT-02 was rigidly base-mounted to the steel shake table interface plate with (6) 3/8" grade 5 bolts and washers. The UPS unit was attached to the rigid mounting bracket (Part 001-00090-01-FNL) with (2) cam straps (Part 018-00076). The rigid mounting bracket was made with 0.1" thick steel having a width of 13.3" and depth of 20.9" while featuring 0.8" tall flanges along the sides in the Y-direction. Both cam straps had a width of 1", length of 87", utility polyester construction, breaking strength of 3,585 pounds, and were spaced 15.5" in the Y-direction. The steel shake table interface plate was attached to the shake table with M12 threaded rods.



Overall view of UUT-02

UUT-03 UNIT UNDER TEST (UUT) Summary Sheet



DCL Project Number:

ber: 02401-2201

Manufacturer: NXT Power
Product Line: Integrity Max R/T

Model Number: NPTU1500-OR-N

Product Construction Summary: Powder Coated Carbon Steel

Options / Component Summary:

Uninterruptible Power Supply (UPS) with display, fan, fuses, overload protectors, batteries, metal band, transformer, and a rigid mounting bracket.

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.

			וטט	Properti	es			
Operating Weight		Dimensi	ons (inche	s)		Lowest Natural Frequency (Hz)		
(lb)	Depth	Wi	Width R O D Height		Front-Back	Side-Side	Vertical	
80	27.5	8	8.3 17.5		10.0	>33.3	>33.3	
		J.F.	Seismic 1	Test Parai	meters	2		
Building Code	Test Criteria	Sds (g)	z/h	lp	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)
CBC 2022 ICC-ES A		2.00	1.0		3.20	2.40	1.67	0.67
	ICC-ES ACISE	2.50	0.0	P_1:574	19 5.20	3.20 2.40		0.07

Unit Mounting Description:

UUT-03 was rigidly base-mounted to the steel shake table interface plate with (6) 3/8" grade 5 bolts and washers. The UPS unit was secured to the rigid mounting bracket (Part 001-00136-01-FNL) with (1) metal band (Part 001-00137-01-FNL) secured with (6) 1/4" grade 5 threaded rods, washers, lock washers, and nuts. The rigid mounting bracket was made with 0.1" thick steel having a width of 8.3" and depth of 27.5" while featuring 0.8" tall flanges along the sides in the Y-direction. The metal band was constructed with 0.1" thick steel while being 5" in width, 8" in depth, and 17.5" in height. The steel shake table interface plate was attached to the shake table with M12 threaded rods.



Overall view of UUT-03