



**OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT
FACILITIES DEVELOPMENT DIVISION**

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

OFFICE USE ONLY	
APPLICATION #:	OSP – 0615

OSHPD Special Seismic Certification Preapproval (OSP)

Type: New Renewal

Manufacturer Information

Manufacturer: Best Healthcare

Manufacturer's Technical Representative: Cameron Memmott

Mailing Address: 302 East Street

Telephone: (844) 465-8260 Email: Cameron.Memmott@bestgroup.com

Product Information

Product Name: BestIQ 9800

Product Type: Nurse Call

Product Model Number: See Attachment
(List all unique product identification numbers and/or part numbers)

General Description: _____

Mounting Description: Rack mounted units within rigid base mounted rack. See last page of OSP for certified rack to be used for all installations. B-line Eaton Rack Model SB85219084

Applicant Information

Applicant Company Name: TRU Compliance, by Structural Integrity Associates, Inc.

Contact Person: Galen Reid

Mailing Address: 5215 Hellyer Ave., Suite 210, San Jose, CA 95138

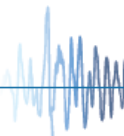
Telephone: 844-878-0200 Email: greid@structint.com

I hereby agree to reimburse the Office of Statewide Health Planning and Development review fees in accordance with the California Administrative Code, 2016.

Signature of Applicant:  Date: 7/3/2019

Title: Program Manager Company Name: TRU Compliance, by Structural Integrity Associates, Inc.

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





**OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT
FACILITIES DEVELOPMENT DIVISION**

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

Company Name: TRU Compliance, by Structural Integrity Associates, Inc.

Name: Andy Coughlin California License Number: S6082

Mailing Address: 5215 Hellyer Ave., Suite 210, San Jose, CA 95138

Telephone: 844-878-0200 Email: acoughlin@structint.com

Supports and Attachments Preapproval

- Supports and attachments are preapproved under OPM- _____
(Separate application for OSHPD Preapproval of Manufacturer's Certification (OPM) of Supports and attachments is required)
- Supports and attachments are not preapproved

Certification Method

- Testing in accordance with: ICC-ES AC156
- Other (Please Specify): _____

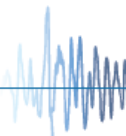
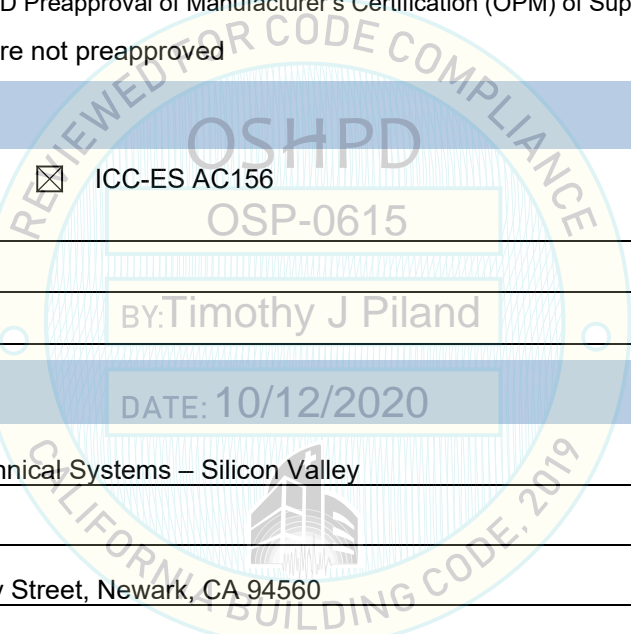
Testing Laboratory

Company Name: National Technical Systems – Silicon Valley

Contact Name: Ray Chavez

Mailing Address: 38995 Cherry Street, Newark, CA 94560

Telephone: (877)245-7800 Email: Ray.Chavez@nts.com





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FACILITIES DEVELOPMENT DIVISION

Seismic Parameters

Design in accordance with ASCE 7-10 Chapter 13: [X] Yes [] No

Design Basis of Equipment or Components (Fp/Wp) = 1.50 (SDS = 2.00); 1.13 (SDS = 2.50)

SDS (Design spectral response acceleration at short period, g) = 2.00 (z/h = 1); 2.50 (z/h = 0)

ap (In-structure equipment or component amplification factor) = 2.5

Rp (Equipment or component response modification factor) = 6.0

Omega_0 (System overstrength factor) = 2

Ip (Importance factor) = 1.5

z/h (Height factor ratio) = 1 (SDS = 2.00); 0 (SDS = 2.50)

Equipment or Component Natural Frequencies (Hz) = See Attachment

Overall dimensions and weight (or range thereof) = See Attachment

Equipment or Components @ grade designed in accordance with ASCE 7-10 Chapter 15: [] Yes [X] No

Design Basis of Equipment or Components (V/W) =

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

SD1 (Design spectral response acceleration at 1 second period, g) =

R (Response modification coefficient) =

Omega_0 (System overstrength factor) =

Cd (Deflection amplification factor) =

Ip (Importance factor) = 1.5

Height to Center of Gravity above base =

Equipment or Component Natural Frequencies (Hz) =

Overall dimensions and weight (or range thereof) =

Tank(s) designed in accordance with ASME BPVC, 2015: [] Yes [X] No

List of Attachments Supporting Special Seismic Certification

[X] Test Report(s) [] Drawings [] Calculations [X] Manufacturer's Catalog

[X] Other(s) (Please Specify): Product Matrices

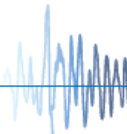
OSHPD Approval (For Office Use Only) - Approval Expires on December 31, 2025

Signature: [Signature] Date: October 12, 2020

Print Name: Timothy J. Piland Title: SSE

Special Seismic Certification Valid Up to: SDS (g) = See Above z/h = See Above

Condition of Approval (if applicable): See last page of OSP for tested required rack specifications. B-line Eaton Rack Model SB85219084



SPECIAL SEISMIC CERTIFICATION CERTIFIED COMPONENT MATRIX

TRU PROJECT NO. 1800569



Manufacturer: Best Healthcare Model Line: BestIQ 9800	<h2>TABLE 1</h2>
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Certified Product Construction Summary:
Carbon steel cabinet

Certified Options Summary:
See table 2 for optional components

Mounting Configuration:
2 post rack mounted-rigid
Note: Installed mounting configuration must be of similar configuration and equivalent strength and stiffness to those tested.

Building Code: CBC 2016 **Seismic Certification Limits:** $S_{DS} = 2.0 g$ $z/h = 1.0$ $I_p = 1.5$
 $S_{DS} = 2.5 g$ $z/h = 0.0$

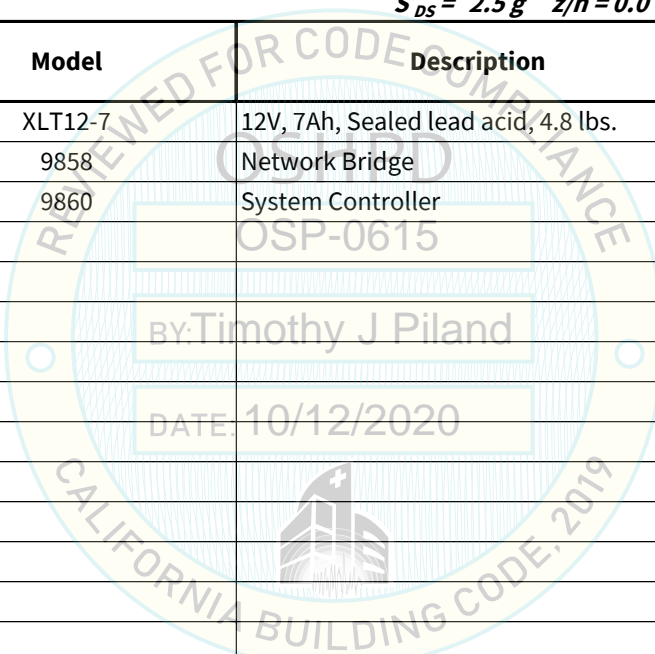
Model Line	Model	Dimensions (in)			Weight (lb)	Notes	UUT
		Depth	Width	Height			
BestIQ 9800	9855	5	17	12.25	18	2-Post Rack Mounted ¹	1A, 1B

SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENT MATRIX

TRU PROJECT NO. 1800569



Manufacturer: Best Healthcare		Table Description: Subcomponents			TABLE 2
Model Line: BestIQ 9800					
Building Code: CBC 2016		Seismic Certification Limits: $S_{DS} = 2.0 g$ $z/h = 1.0$ $S_{DS} = 2.5 g$ $z/h = 0.0$			$I_p = 1.5$
Component Type	Manufacturer	Model	Description	Notes	UUT
Battery	X-LENT Power	XLT12-7	12V, 7Ah, Sealed lead acid, 4.8 lbs.		1A, 1B
Optional Plug-in Circuit Boards	Best Healthcare	9858	Network Bridge		1A
		9860	System Controller		1A



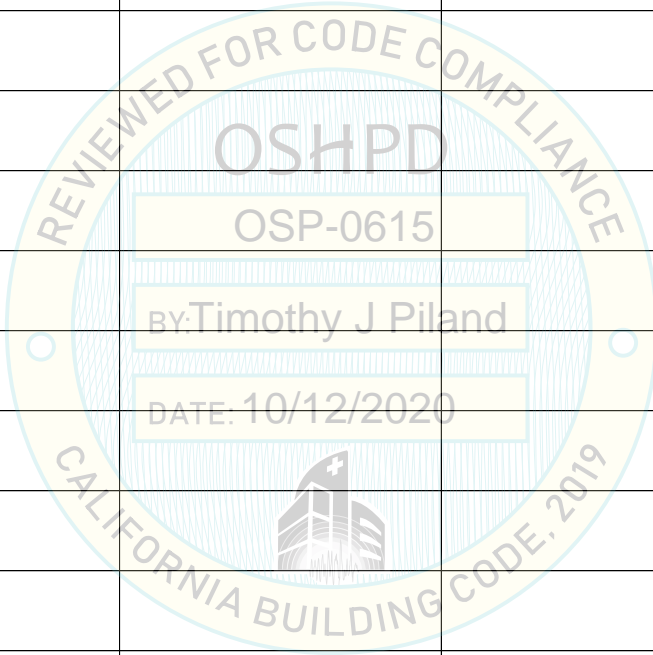
UNIT UNDER TEST (UUT) SUMMARY SHEET



TRU PROJECT NO. 1800569

Manufacturer: Best Healthcare
Model Line: BestIQ 9800

UUT	Unit Description	Report Number	Testing Laboratory	S _{DS}	z/h	I _p
1A	BestIQ 9800	TR-089325.01-ENV Rev.0	National Technical Systems - Silicon Valley	2.0 2.5	1 0	1.5
1B	BestIQ 9800	TR-089325.01-ENV Rev.0	National Technical Systems - Silicon Valley	2.0 2.5	1 0	1.5



Notes:

UNIT UNDER TEST (UUT) SUMMARY SHEET

TRU PROJECT NO. 1800569



Manufacturer: Best Healthcare	UUT 1A
Model Line: BestIQ 9800	
Model Number: 9855	
Serial Number: N/A	

Product Construction Summary:
Carbon steel cabinet

Options/Subcomponent Summary:
9858 Network Bridge, 9860 System Controller, 12V 7Ah battery

UUT Properties

Weight (lb)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
18	5	17	12.25	6.9	5.2	>33.3

UUT Highest Passed Seismic Run Information

Building Code	Test Criteria	S _{DS} (g)	z/h	I _p	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
CBC 2016	ICC-ES AC156 (2015)	2.0	1.0	1.5	3.20	2.40	1.67	0.67
		2.5	0.0					

Test Mounting Details:



1A

B-Line Eaton two post rack (PN: SB85219084) was rigid base mounted to the shake table using (4) 5/8" Grade 8 bolts. Shelves of rack were populated with 780 lbs. of 1/4" thick steel plates as high as possible to increase the total rack weight. Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test. Contents were included in testing per operating conditions.

UNIT UNDER TEST (UUT) SUMMARY SHEET

TRU PROJECT NO. 1800569



Manufacturer: Best Healthcare

Model Line: BestIQ 9800

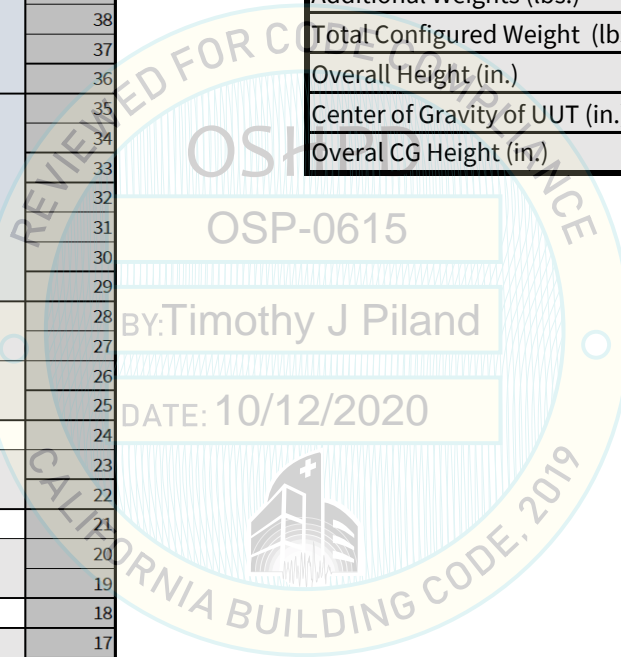
Model Number: 9855

Serial Number: N/A

UUT 1A

Rack Configuration	
Position on Rack	Position on Rack
43	43
42	42
41	41
40	40
39	39
38	38
37	37
36	36
35	35
34	34
33	33
32	32
31	31
30	30
29	29
28	28
27	27
26	26
25	25
24	24
23	23
22	22
21	21
20	20
19	19
18	18
17	17
16	16
15	15
14	14
13	13
12	12
11	11
10	10
9	9
8	8
7	7
6	6
5	5
4	4
3	3
2	2
1	1

UUT 1B	
Model Number:	9855
UUT Weight (lbs.)	18
2 Post Rack Weight w/ shelves (lbs.)	180
Additional Weights (lbs.)	780
Total Configured Weight (lbs.)	996
Overall Height (in.)	84
Center of Gravity of UUT (in.)	72.4
Overall CG Height (in.)	43.7



UNIT UNDER TEST (UUT) SUMMARY SHEET

TRU PROJECT NO. 1800569



Manufacturer: Best Healthcare	UUT 1B
Model Line: BestIQ 9800	
Model Number: 9855	
Serial Number: N/A	

Product Construction Summary:
Carbon steel cabinet

Options/Subcomponent Summary:
12V 7Ah battery

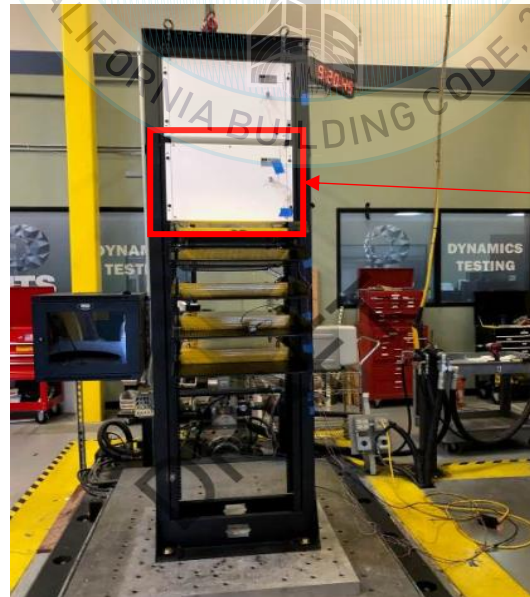
UUT Properties

Weight (lb)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
18	5	17	12.25	6.9	5.2	>33.3

UUT Highest Passed Seismic Run Information

Building Code	Test Criteria	S _{DS} (g)	z/h	I _P	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
CBC 2016	ICC-ES AC156 (2015)	2.0	1.0	1.5	3.20	2.40	1.67	0.67
		2.5	0.0					

Test Mounting Details:



1B

B-Line Eaton two post rack (PN: SB85219084) was rigid base mounted to the shake table using (4) 5/8" Grade 8 bolts. Shelves of rack were populated with 780 lbs. of 1/4" thick steel plates as high as possible to increase the total rack weight. Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test. Contents were included in testing per operating conditions.

UNIT UNDER TEST (UUT) SUMMARY SHEET

TRU PROJECT NO. 1800569



Manufacturer: Best Healthcare

Model Line: BestIQ 9800

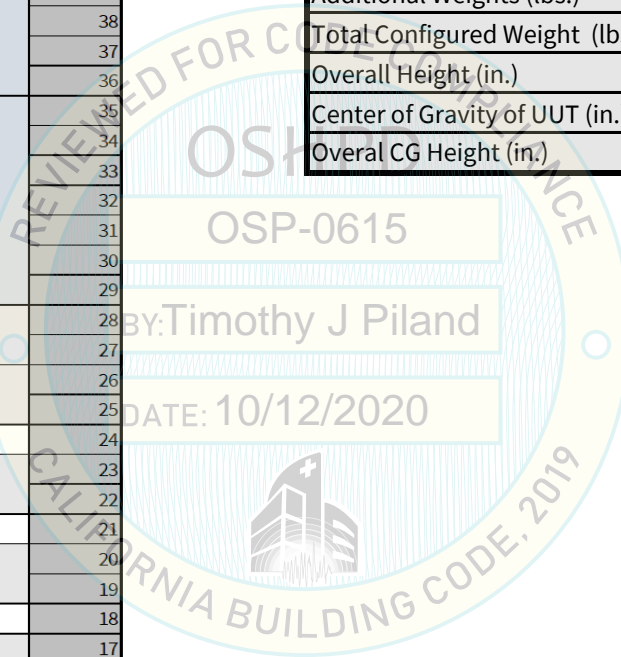
Model Number: 9855

Serial Number: N/A

UUT 1B

Rack Configuration	
Position on Rack	Position on Rack
43	43
42	42
41	41
40	40
39	39
38	38
37	37
36	36
35	35
34	34
33	33
32	32
31	31
30	30
29	29
28	28
27	27
26	26
25	25
24	24
23	23
22	22
21	21
20	20
19	19
18	18
17	17
16	16
15	15
14	14
13	13
12	12
11	11
10	10
9	9
8	8
7	7
6	6
5	5
4	4
3	3
2	2
1	1

UUT 1B	
Model Number:	9855
UUT Weight (lbs.)	18
2 Post Rack Weight w/ shelves (lbs.)	180
Additional Weights (lbs.)	780
Total Configured Weight (lbs.)	996
Overall Height (in.)	84
Center of Gravity of UUT (in.)	60.1
Overall CG Height (in.)	43.7



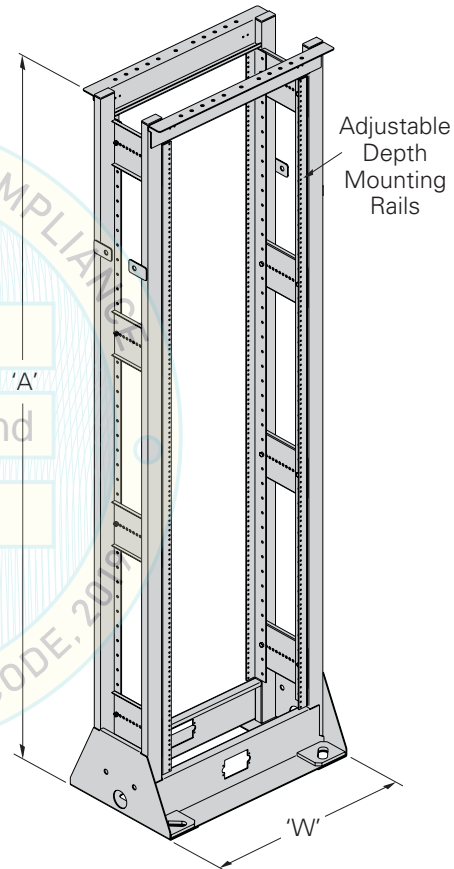
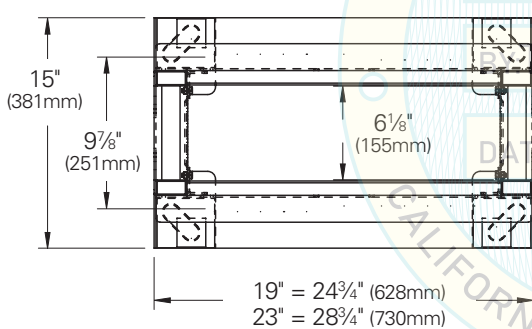
Network Equipment Racks & Accessories

Two-Post Relay Rack

Two-Post Seismic Relay Rack 19" & 23" Panel Mounting, Welded Steel

- Independently tested to NEBS GR-63-CORE Seismic Zone 4 standard; and for 900 lbs. (408kg) of equipment
- Independent testing conducted in accordance with ICBO AC156 standard for use up to 900 lbs. (408kg)
- Conformance to EIA/ECA-310-E
- Mounting rail spacing is adjustable from 3" (76mm) to 8" (203mm)
- 43 RMU (rack mounting units)
- Open top, bottom, and sides permit unlimited cable management options
- Industry standard mounting holes on sides allow attachment of vertical cable managers
- Top angles drilled for runway attachment
- Openings in front and rear of base for duplex receptacle mounting
- Holes for grounding provided in four locations
- Tubular steel frame provides a high degree of strength to weight ratio
- See page ii for link to OPM approvals
- Concrete installation requires (4) AWA-62-350 (sold separately)
- Finish ____: Flat black powder coat (FB)
Telco gray powder coat (TG)

Network equipment racks & accessories



Part Number	'A' Height In. (mm)	'W' Spacing In. (mm)	Mounting Spaces	Shipping Weight Lbs. (kg)
19" (482mm) Rack Width				
SB85219084 _____	84" (2133)	24 3/4" (628)	43	113 (51.3)
SB85219096 _____	96" (2438)	24 3/4" (628)	49	124 (56.2)
23" (584mm) Rack Width				
SB85223084 _____	84" (2133)	28 3/4" (730)	43	117 (53.1)
SB85223096 _____	96" (2133)	28 3/4" (730)	49	127 (57.6)

Specify part number and finish when ordering.