



OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT
FACILITIES DEVELOPMENT DIVISION

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

OFFICE USE ONLY

APPLICATION #: OSP - 0202 - 10

OSHPD Special Seismic Certification Preapproval (OSP)

Type: New Renewal

Manufacturer Information

Manufacturer: STERIS Corp.

Manufacturer's Technical Representative: Jerime Pichler

Mailing Address: 5960 Heisley Road, Mentor, OH, 44060

Telephone: 440-205-7664

Email: Jerime_Pichler@steris.com

Product Information

Product Name: RPC (Remote Panel Control)

Product Type: Lighting Control Panel

Product Model Number: RPC

(List all unique product identification numbers and/or part numbers)

General Description: Power and controls for the Harmony VLED surgical lighting system including up to three lighthoods, with or without video. Each panel may include up to three power supplies. Enclosures are NEMA Type 1, constructed of carbon steel in accordance with UL 50, which are mounted to a supporting wall structure.

Mounting Description: Rigidly mounted to wall.

Applicant Information

Applicant Company Name: ISAT Total Support

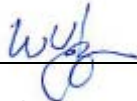
Contact Person: William V Joerger

Mailing Address: 1020 Crews Road, Suite Q, Matthews, NC 20105

Telephone: 510-714-0216

Email: wvjoerger@isatsb.com

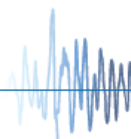
I hereby agree to reimburse the Office of Statewide Health Planning and Development review fees in accordance with the California Administrative Code, 2016.

Signature of Applicant: 

Date: 14 March, 2017

Title: Principal Structural Engineer

Company Name: ISAT





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

Company Name: ISAT
Name: William V Joerger California License Number: SE 4545
Mailing Address: 1020 Crews Road, Suite Q, Matthews, NC 20105
Telephone: 510-714-0216 Email: wvjoerger@isatsb.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

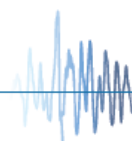
Certification Method

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

Testing Laboratory

Company Name: Environmental Testing Laboratory, Inc.
Contact Name: Brady Richard
Mailing Address: 11034 Indian Trail, Dallas, TX 75229-3513
Telephone: 972-247-9657 Email: brady@etldallas.com

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





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Seismic Parameters

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

Design Basis of Equipment or Components (F_p/W_p) = 1.95

S_{DS} (Design spectral response acceleration at short period, g) = 2.60

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

R_p (Equipment or component response modification factor) = 6.0

Ω_0 (System overstrength factor) = 2.0

I_p (Importance factor) = 1.5

z/h (Height factor ratio) = 1.0

Equipment or Component Natural Frequencies (Hz) = N/A

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

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

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

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

S_{D1} (Design spectral response acceleration at 1 second period, g) = _____

R (Response modification coefficient) = 1.0

Ω_0 (System overstrength factor) = 1.0

C_d (Deflection amplification factor) = 1.0

I_p (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 No

List of Attachments Supporting Special Seismic Certification

Test Report(s) Drawings Calculations Manufacturer's Catalog

Other(s) (Please Specify): Attachment 1 – RPC Comparison

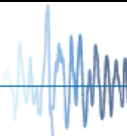
OSHPD Approval (For Office Use Only) – Approval Expires on December 31, 2022

Signature:  Date: 3/29/2017

Print Name: M. R. Karim Title: SHFR

Special Seismic Certification Valid Up to : S_{DS} (g) = 2.60 z/h = 1.0

Condition of Approval (if applicable): _____



STERIS CORPORATION

ATTACHMENT 1: CERTIFIED COMPONENTS

SEISMIC COMPLIANCE REPORT

TABLE 1

MANUFACTURER:		STERIS CORPORATION				
PRODUCT FAMILY:		RPC (REMOTE PANEL CONTROL)				
MODEL NUMBER	DIMENSIONS (in)			MAX. WT. (lb)	DESCRIPTION / NOTES	BASIS
	DEPTH	WIDTH	HEIGHT			
RPC (Remote Panel Control)						
RPC	7	20	20	62		UUT 1,2
MOUNTING:	Rigid wall mounted.			SEISMIC LEVEL	$S_{DS} = 2.6g$ for $z/h = 1$	$I_p = 1.5$
NOTES:	Product Construction: NEMA 1 carbon steel enclosure. Options/Subcomponents: Enclosures may contain any combination of subcomponents listed in Table 2 to create a complete controller.					

TABLE 2 - SUBCOMPONENTS

MANUFACTURER:		STERIS CORPORATION				
PRODUCT FAMILY:		RPC (REMOTE PANEL CONTROL)				
MODEL NUMBER	DIMENSIONS (in)			MAX. WT. (lb)	DESCRIPTION / NOTES	BASIS
	DEPTH	WIDTH	HEIGHT			
Hammond Manufacturing - Enclosure						
N1A20207	7	20	20		Carbon steel	UUT 1,2
Conversion Devices Inc. - Power Supply						
SMD275BBS					QTY=3 tested in each UUT	UUT 1,2
STERIS Corporation - PCB						
136824-089 - Master Control						UUT 1,2
136824-091 - Communication						UUT 1,2
136824-341 - ACal						UUT 1,2
Corcom - Line Filter						
6EH6						UUT 1,2
Springer - Power Switch						
MLO32						UUT 1,2
MOUNTING:	Mounted within unit.			SEISMIC LEVEL	$S_{DS} = 2.6g$ for $z/h = 1$	$I_p = 1.5$
NOTES:	Product Construction/Options: Model number uniquely identifies manufacturer, materials and configuration of subcomponents.					
STERIS added vHD video scalar module (10041940), manufactured by STERIS VTS, after testing.						

STERIS CORPORATION

ATTACHMENT 2: UNIT UNDER TEST SUMMARIES

SEISMIC COMPLIANCE REPORT

UUT 1

MANUFACTURER:		STERIS CORPORATION				
MODEL NUMBER:		RPC				
UNIT FUNCTION:		LIGHTING CONTROL PANEL				
SERIAL NUMBER:		0419511060				
DIMENSIONS (in)			WEIGHT (lb)	RES. FREQ. (Hz)		
DEPTH	WIDTH	HEIGHT		F-B	S-S	V
7	20	20	62	N/A	N/A	N/A
BUILDING CODE		TEST CRITERIA		LAB REPORT NO.		
2016 CBC		ICC-ES AC156		ETL SQ14-1112-01		
S_{DS} (g)	z/h	A_{FLX-H} (g)	A_{RIG-H} (g)	A_{FLX-V} (g)	A_{RIG-V} (g)	
2.6	1	4.16	3.12	1.74	0.70	
IMPORTANCE FACTOR, I_p = 1.5						
Unit was full of operating content during the shake table test. Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test.						
MOUNTING:		Rigid wall mounted using (4) 1/4" Grade 5 bolts to PS200 Power-Strut. PS200 mounted to wall using (3) #14 screws.				
CONSTRUCTION:		NEMA 1 carbon steel enclosure				
SUBCOMPONENTS:		Conversion Devices Inc. - power supply (QTY=3: SMD275BBS), STERIS Corporation - PCB (136824-089, 136824-091, 136824-341), Corcom - line filter (6EH6), Springer - power switch (MLO32), vHD video scalar module (10041940).				
TESTING NOTES:		N/A				



UUT 2

MANUFACTURER:		STERIS CORPORATION				
MODEL NUMBER:		RPC				
UNIT FUNCTION:		LIGHTING CONTROL PANEL				
SERIAL NUMBER:		0419511061				
DIMENSIONS (in)			WEIGHT (lb)	RES. FREQ. (Hz)		
DEPTH	WIDTH	HEIGHT		F-B	S-S	V
7	20	20	62	N/A	N/A	N/A
BUILDING CODE		TEST CRITERIA		LAB REPORT NO.		
2016 CBC		ICC-ES AC156		ETL SQ14-1112-01		
S_{DS} (g)	z/h	A_{FLX-H} (g)	A_{RIG-H} (g)	A_{FLX-V} (g)	A_{RIG-V} (g)	
2.6	1	4.16	3.12	1.74	0.70	
IMPORTANCE FACTOR, I_p = 1.5						
Unit was full of operating content during the shake table test. Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test.						
MOUNTING:		Rigid wall mounted using (4) 1/4" Grade 5 bolts to PS200 Power-Strut. PS200 mounted to wall using (3) #14 screws.				
CONSTRUCTION:		NEMA 1 carbon steel enclosure				
SUBCOMPONENTS:		Conversion Devices Inc. - power supply (QTY=3: SMD275BBS), STERIS Corporation - PCB (136824-089, 136824-091, 136824-341), Corcom - line filter (6EH6), Springer - power switch (MLO32), vHD video scalar module (10041940).				
TESTING NOTES:		N/A				

