	BUREAU VERITAS	
RF Exposure Report		
Report No.:	MFCCOG-WTW-P22060454	
FCC ID:	2AH7L-UPSB	
Test Model:	PAS600L	
Series Model:	PAS600T, PAS600	
Received Date:	Jun. 15, 2022	
Test Date:	Sep. 08, 2022	
Issued Date:	Oct. 28, 2022	
Applicant: Address:	Schneider Electric Industries SAS Electropole Site - 38EQ1, 31 rue Pierre Mendes France, Eybens - 38050 Grenoble cedex 9	
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Lin Kou Laboratories	
Lab Address:	No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan	
Test Location:	No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City 33383. TAIWAN	
FCC Registration / Designation Number:	788550 / TW0003	



This report is governed by, and incorporates by reference, the Conditions of Testing as posted at the date of issuance of this report at <a href="http://www.bureauveritas.com/home/about-us/our-business/cps/about-us/terms-conditions/">http://www.bureauveritas.com/home/about-us/our-business/cps/about-us/terms-conditions/</a> and is intended for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. Measurement uncertainty is only provided upon request for accredited tests. Statements of conformity are based on simple acceptance criteria without taking measurement uncertainty into account, unless otherwise requested in writing. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence or if you require measurement uncertainty; provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.



# Table of Contents

Relea	ise Control Record	3
1	Certificate of Conformity	4
2	Applicable RF Exposure Limit	5
3	Applicable Evaluation Criteria	6
4	Test Result	. 7
5	Conclusion	. 7



## **Release Control Record**

Issue No.	Description	Date Issued
MFCCOG-WTW-P22060454	Original Release	Oct. 28, 2022



# **Certificate of Conformity** 1 **Product:** EcoStruxure Panel Server Universal Brand: Schneider Electric Test Model: PAS600L Series Model: PAS600T, PAS600 Sample Status: Identical Prototype Applicant: Schneider Electric Industries SAS **Test Date:** Sep. 08, 2022 FCC Rule Part: FCC Part 2 (Section 2.1091 & 2.1093) Standards: KDB 447498 D04 Interim General RF Exposure Guidance v01

The above equipment has been tested by Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's RF characteristics under the conditions specified in this report.

Prepared by :

Sina Lin, Date:\_

Gina Liu / Specialist

Approved by :

Jeremy Lin, Date: Oct. 28, 2022

Oct. 28, 2022

Jeremy Lin / Project Engineer



## 2 Applicable RF Exposure Limit

§ 1.1310 Radiofrequency radiation exposure limits.

(a) Specific absorption rate (SAR) shall be used to evaluate the environmental impact of human exposure to radiofrequency (RF) radiation as specified in § 1.1307(b) of this part within the frequency range of 100 kHz to 6 GHz (inclusive).

(b) The SAR limits for occupational/controlled exposure are 0.4 W/kg, as averaged over the whole body, and a peak spatialaverage SAR of 8 W/kg, averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube). Exceptions are the parts of the human body treated as extremities, such as hands, wrists, feet, ankles, and pinnae, where the peak spatial-average SAR limit for occupational/controlled exposure is 20 W/kg, averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube). Exposure may be averaged over a time period not to exceed 6 minutes to determine compliance with occupational/controlled SAR limits.

(c) The SAR limits for general population/uncontrolled exposure are 0.08 W/kg, as averaged over the whole body, and a peak spatial-average SAR of 1.6 W/kg, averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube). Exceptions are the parts of the human body treated as extremities, such as hands, wrists, feet, ankles, and pinnae, where the peak spatial-average SAR limit is 4 W/kg, averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube). Exceptions are the peak spatial-average SAR limit is 4 W/kg, averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube). Exposure may be averaged over a time period not to exceed 30 minutes to determine compliance with general population/uncontrolled SAR limits.

(e) Maximum Permissible Exposure (MPE) to radiofrequency electromagnetic fields

Frequency Electric Field Magnetic Field Power Density Average Time Range (MHz) Strength (V/m) Strength (A/m)  $(mW/cm^2)$ (minutes) Limits For General Population / Uncontrolled Exposure 0.3-1.34 614 1.63  $(100)^*$ 30 1.34-30 824/f 2.19/f (180/f<sup>2</sup>)\* 30 27.5 30-300 0.073 0.2 30 300-1500 f/1500 30 . . . 1.0 30 1500-100,000 . . . . . .

Limits for General Population/Uncontrolled Exposure

f = frequency in MHz. \* = Plane-wave equivalent power density.

#### Limits for Occupational/Controlled Exposure

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm <sup>2</sup> )	Average Time (minutes)	
Limits For General Population / Uncontrolled Exposure					
0.3-3.0	614	1.63	*(100)	⊴6	
3.0-30	1842/f	4.89/f	*(900/f2)	<6	
30-300	61.4	0.163	1.0	<6	
300-1,500			f/300	<6	
1,500-100,000			5	<6	

f = frequency in MHz. \* = Plane-wave equivalent power density.



## 3 Applicable Evaluation Criteria

- $\boxtimes$  <u>1 mW Blanket Exemption §1.1307(b)(3)(i)(A)</u>
- The available maximum time-averaged power is no more than 1 mW, regardless of separation distance. This exemption may not be used in conjunction with other exemption criteria other than those in paragraph (b)(3)(ii)(A) of this section. Medical implant devices may only use this exemption and that in paragraph (b)(3)(ii)(A).

#### $\square \underline{\mathsf{MPE-based Exemption} - \$1.1307(b)(3)(i)(C)}$

The minimum separation distance (R in meters) from the body of a nearby person for the frequency (f in MHz) at which the source operates, the ERP (watts) is no more than the calculated value prescribed for that frequency. Table applies to any RF source (i.e. single fixed, mobile, and portable transmitters) and specifies power and distance criteria for each of the five frequency ranges used for the MPE limits.

RF Source frequency (MHz)	Threshold ERP (watts)	
0.3-1.34	1,920 R <sup>2</sup> .	
1.34-30	3,450 R <sup>2</sup> /f <sup>2</sup> .	
30-300	3.83 R <sup>2</sup> .	
300-1,500	0.0128 R <sup>2</sup> f.	
1,500-100,000	19.2R <sup>2</sup> .	
R must be at least $\lambda/2\pi$ , where $\lambda$ is the free-space operating wavelength in meters		

- $\square$  MPE-based Exemption §1.1307(b)(3)(i)(B)
- For mobile devices that are not exempt per Table 1 of §1.1307(b)(1)(i)(C) and device at distances from 20 cm to 40 cm and in 0.3 GHz to 6 GHz.

 $P_{\text{th}} (\text{mW}) = ERP_{20 \text{ cm}} (\text{mW}) = \begin{cases} 2040f & 0.3 \text{ GHz} \le f < 1.5 \text{ GHz} \\ \\ 3060 & 1.5 \text{ GHz} \le f \le 6 \text{ GHz} \end{cases}$ 

- $\Box$  SAR-based Exemption (1.1307(b)(3)(i)(B))
- The SAR-based exemption formula of §1.1307(b)(3)(i)(B), applies for single fixed, mobile, and portable RF sources with available maximum time-averaged power or effective radiated power (ERP), whichever is greater, of less than or equal to the threshold Pth (mW). This method shall only be used at separation distances from 0.5 cm to 40 cm and at frequencies from 0.3 GHz to 6 GHz

$$P_{\rm th} \,({\rm mW}) = \begin{cases} ERP_{20\,{\rm cm}} (d/20\,{\rm cm})^x & d \le 20\,{\rm cm} \\ \\ ERP_{20\,{\rm cm}} & 20\,{\rm cm} < d \le 40\,{\rm cm} \end{cases}$$

where

$$x = -\log_{10}\left(\frac{60}{ERP_{20}\operatorname{cm}\sqrt{f}}\right)$$

and f is in GHz, d is the separation distance (cm)

When 10-g extremity SAR applies, SAR test exemption may beconsidered by applying a factor of 2.5 to the SAR-based exemption thresholds.



# 4 Test Result

1 mW Blanket Exemption					
Operation Mode	Frequency Band (MHz)	Average Power (mW)	Limit (mW)	Test Result	
Bluetooth	2402-2480	0.002844	1	Pass	
Zigbee	2405-2480	0.1309	1	Pass	
WLAN 2.4GHz	2412-2462	0.8166	1	Pass	

Note:

- 1. This report is prepared for FCC class II permissive change. The difference compared with the original report (BV CPS report no.: SABHBQ-WTW-P21030022) is reducing power setting and changing internal antenna gain. The output power is lowered via firmware/software settings only (and cannot be changed by end-user / any other third parties). Therefore, re-calculated MPE value in this report.
- 2. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
- 3. Detail antenna specification please refer to antenna datasheet or an antenna gain measurement report.

# 5 Conclusion

Source-base time average power is below Exemption Criteria and/or Routine Evaluation MPE thresholds, therefore the device is compliant FCC RF exposure requirement.

--- END ---