

## RF Exposure Report

**Report No.:** SABHBQ-WTW-P21080521

**FCC ID:** 2AH7L-UPSA

**Test Model:** PAS800, PAS800L, PAS800P

**Received Date:** Aug. 12, 2021

**Test Date:** Aug. 31 ~ Oct. 27, 2021

**Issued Date:** Jan. 14, 2022

**Applicant:** Schneider Electric Industries SAS

**Address:** 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



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### Release Control Record

Issue No.	Description	Date Issued
SABHBQ-WTW-P21080521	Original release.	Jan. 14, 2022

## 1 Certificate of Conformity

**Product:** EcoStruxure™ Panel Server Advanced

**Brand:** Schneider Electric

**Test Model:** PAS800, PAS800L, PAS800P

**Sample Status:** Engineering sample


**Applicant:** Schneider Electric Industries SAS


**Test Date:** Aug. 31 ~ Oct. 27, 2021

**Standards:** FCC Part 2 (Section 2.1091)

**References Test Guidance:** KDB 447498 D01 General RF Exposure Guidance v06

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 :**  , **Date:** Jan. 14, 2022  
Polly Chien / Specialist

**Approved by :**  , **Date:** Jan. 14, 2022  
Jeremy Lin / Project Engineer

## 2 RF Exposure

### 2.1 Limits for Maximum Permissible Exposure (MPE)

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				
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f <sup>2</sup> )*	30
30-300	27.5	0.073	0.2	30
300-1500	...	...	f/1500	30
1500-100,000	...	...	1.0	30

f = Frequency in MHz; \*Plane-wave equivalent power density

### 2.2 MPE Calculation Formula

$$Pd = (Pout * G) / (4 * \pi * r^2)$$

where

Pd = power density in mW/cm<sup>2</sup>

Pout = output power to antenna in mW

G = gain of antenna in linear scale

pi = 3.1416

r = distance between observation point and center of the radiator in cm

### 2.3 Classification

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as Mobile Device.

### 3 Calculation Result of Maximum Conducted Power

Radio	Frequency Band (MHz)	Max. AV Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
<b>Internal antenna</b>						
2.4GHz	2412-2462	12.17	3.8	20	0.008	1
5GHz	5180-5240	6.69	2.1	20	0.002	1
	5745-5825	7.08	2.1	20	0.002	1
BT LE	2402-2480	4.98	3.8	20	0.002	1
Zigbee	2405-2480	4.35	5.1	20	0.002	1
<b>External antenna</b>						
2.4GHz	2412-2462	11.08	2.54	20	0.005	1
5GHz	5180-5240	6.68	3	20	0.002	1
	5745-5825	6.13	3	20	0.002	1
BT LE	2402-2480	3.63	2.54	20	0.001	1
Zigbee	2405-2480	6.90	2.54	20	0.002	1

Note:

1. The above Antenna information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.
2. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
3. The WLAN 2.4GHz, 5GHz, Zigbee and BT of the device can transmit simultaneously but not WLAN 2.4GHz and 5GHz at the same time.

#### Conclusion:

Both of the WLAN, Zigbee and BT can transmit simultaneously, the formula of calculated the MPE is:

$$CPD1 / LPD1 + CPD2 / LPD2 + \dots \text{etc.} < 1$$

CPD = Calculation power density

LPD = Limit of power density

#### Internal antenna

1. WLAN 2.4GHz + BLE + Zigbee =  $0.008 / 1 + 0.002 / 1 + 0.002 / 1 = 0.012$
2. WLAN 5GHz + BLE + Zigbee =  $0.002 / 1 + 0.002 / 1 + 0.002 / 1 = 0.006$

#### External antenna

1. WLAN 2.4GHz + BLE + Zigbee =  $0.005 / 1 + 0.001 / 1 + 0.002 / 1 = 0.008$
2. WLAN 5GHz + BLE + Zigbee =  $0.002 / 1 + 0.001 / 1 + 0.002 / 1 = 0.005$

Therefore the maximum calculations of above situations are less than the "1" limit.

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