



Test Report No.:
FCCSZ2024-0011-H

RF Test Report

FCC ID : OWWI117756S
EUT : SLW 5G
MODEL : PRO25T-6S-IOT,PRO25T-6S-BTW,PRO20T-6S-BTW
BRAND NAME : N/A
APPLICANT : SHENZHEN HUAPTEC CO., LTD
Classification of Test : N/A

CVC Testing Technology (Shenzhen) Co., Ltd.

Applicant		Name : SHENZHEN HUAPTEC CO., LTD	
		Address :3rd FL,E BLDG, Sogood Science Park, SanWei community, Hangcheng Street, Bao'an District, Shenzhen, China	
Manufacturer		Name : SHENZHEN HUAPTEC CO., LTD	
		Address :3rd FL,E BLDG, Sogood Science Park, SanWei community, Hangcheng Street, Bao'an District, Shenzhen, China	
Equipment Under Test		Name :SLW 5G	
		Model/Type:PRO25T-6S-IOT	
		Additional Model:PRO25T-6S-BTW,PRO20T-6S-BTW	
		Trade mark : N/A	
		Serial NO.:N/A	
		Sampe NO.:2-1	
Date of Receipt.	2024.03.12	Date of Testing	2024.03.12~2024.03.29
Test Specification		Test Result	
FCC Part 2 (Section 2.1091) KDB 447498 D04, IEEE C95.3		PASS	
Evaluation of Test Result	The equipment under test was found to comply with the requirements of the standards applied.		
	Seal of CVC Issue Date: 2024.03.29		
Tested by:  <u>Liang Jiatong</u> Name Signature	Tested by:  <u>Huang Meng</u> Name Signature	Approved by:  <u>Dong Sanbi</u> Name Signature	
Other Aspects: NONE.			
Abbreviations:OK, Pass= passed Fail = failed N/A= not applicable EUT= equipment, sample(s) under tested			

This test report relates only to the EUT, and shall not be reproduced except in full, without written approval of CVC.

TABLE OF CONTENTS

RELEASE CONTROL RECORD	4
1 GENERAL PRODUCT INFORMATION	5
2 RF EXPOSURE LIMITGENERAL INFORMATION	6
2.1 LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (FCC)	6
2.2 LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (IC)	7
2.3 MAXIMUM PERMISSIBLE EXPOSURE RESULT	8

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FCCSZ2024-0011-H	Original release	2024.03.29

1 GENERAL PRODUCT INFORMATION

PRODUCT	SLW 5G
BRAND	N/A
TEST MODEL	PRO25T-6S-IOT
ADDITIONAL MODEL	PRO25T-6S-BTW,PRO20T-6S-BTW
POWER SUPPLY	DC12V from adapter
STANDARDS	FCC Part 2 (Section 2.1091)
	KDB 447498 D04
	IEEE C95.3

1. PRO25T-6S-IOT and PRO25T-6S-BTW are same electrically identical, only the appearance is different
2. PRO25T-6S-BTW and PRO20T-6S-BTW are similar in appearance and size, there is only a difference in model name

2 RF EXPOSURE LIMIT GENERAL INFORMATION

2.1 LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (FCC)

(Option C) Or using Table 1 and 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. For the exemption in Table 1 to apply, R must be at least $\lambda / 2\pi$, where λ is the free-space operating wavelength in meters. If the ERP of a single RF source is not easily obtained, then the available maximum time-averaged power may be used in lieu of ERP if the physical dimensions of the radiating structure(s) do not exceed the electrical length of $\lambda / 4$ or if the antenna gain is less than that of a half-wave dipole (1.64 linear value).

RF SOURCE FREQUENCY (MHZ)	THRESHOLD ERP(W)
0.3 -1.34	$1,920 R^2$
1.34 - 30	$3,450 R^2 F^2$
30 -300	$3.83 R^2$
300-1500	$0.0128 R^2 F$
1500-100,000	$19.2R^2$

2.2 LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (IC)

RF exposure evaluation is required if the separation distance between the user and/or bystander and the device's radiating element is greater than 20 cm, except when the device operates as follows:

- below 20 MHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than 1 W (adjusted for tune-up tolerance);
- at or above 20 MHz and below 48 MHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than $4.49/f^{0.5}$ W (adjusted for tune-up tolerance), where f is in MHz;
- at or above 48 MHz and below 300 MHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than 0.6 W (adjusted for tune-up tolerance);
- at or above 300 MHz and below 6 GHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than $1.31 \times 10^{-2} f^{0.6834}$ W (adjusted for tune-up tolerance), where f is in MHz;
- at or above 6 GHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than 5 W (adjusted for tune-up tolerance).

2.3 MAXIMUM PERMISSIBLE EXPOSURE RESULT

MAXIMUM PERMISSIBLE EXPOSURE (FCC) - PRO25T-6S-IOT

Mode	Frequency (MHz)	Max Tune-up Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	R (cm)	EIRP (dBm)	ERP (dBm)	ERP (W)	Threshold ERP(W)	Ratio
BT-LE*	2402-2480	2.0	/	2.37	25	4.37	2.22	0.002	1.200	0.002
Wi-Fi*	2412-2462	24.0	/	2.37	25	26.37	24.22	0.264	1.200	0.220
DL	617-652	17.5	4.6	8.00	25	20.90	18.75	0.075	0.494	0.152
	728-746	17.5	4.8	8.00	25	20.70	18.55	0.072	0.582	0.124
	746-757	19.0	5.01	8.00	25	21.99	19.84	0.096	0.597	0.161
	869-894	16.5	5.35	8.00	25	19.15	17.00	0.050	0.695	0.072
	1930-1995	17.5	8.01	10.00	25	19.49	17.34	0.054	1.200	0.045
	2110-2155	16.5	8.36	10.00	25	18.14	15.99	0.04	1.200	0.033
UL	663-698	22.5	4.6	8.00	25	25.90	23.75	0.237	0.530	0.447
	698-716	21.5	4.8	8.50	25	25.20	23.05	0.202	0.558	0.362
	776-787	22.5	5.01	8.50	25	25.99	23.84	0.242	0.622	0.389
	824-849	23.5	5.35	8.50	25	26.65	24.50	0.282	0.659	0.428
	1850-1915	26.0	8.01	9.00	25	26.99	24.84	0.305	1.200	0.254
	1710-1755	26.0	7.45	9.00	25	27.55	25.40	0.347	1.200	0.289
Sum of ratio = Wi-Fi + Booster										0.828

Note1: This device can not operate simultaneously in BT and WIFI.

Note2: ERP=EIRP-2.15dB

*The EUT contains a certified module (FCC ID: 2AC7Z-ESP32WROVERB) According to the MPE reports of FCC ID: 2AC7Z-ESP32WROVERB, Wi-Fi and Bluetooth can't transmit simultaneously

Conclusion:

Therefore, the worst-case situation is 0.809(Sum of Ratios), which is less than "1". This confirmed that the device compliance with FCC RF exposure requirements.

PRO25T-6S-IOT to maintain compliance with the FCC's RF exposure guidelines, place the equipment at least 25cm from nearby persons.

MAXIMUM PERMISSIBLE EXPOSURE (FCC) - PRO25T-6S-BTW/PRO20T-6S-BTW

Mode	Frequency (MHz)	Max Tune-up Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	R (cm)	EIRP (dBm)	ERP (dBm)	ERP (W)	Threshold ERP(W)	Ratio
BT-LE*	2402-2480	2.0	/	2.06	25	4.06	1.91	0.002	1.200	0.002
Wi-Fi*	2412-2462	24.0	/	2.06	25	26.06	23.91	0.246	1.200	0.205
DL	617-652	17.5	4.6	8.00	25	20.90	18.75	0.075	0.494	0.152
	728-746	17.5	4.8	8.00	25	20.70	18.55	0.072	0.582	0.124
	746-757	19.0	5.01	8.00	25	21.99	19.84	0.096	0.597	0.161
	869-894	16.5	5.35	8.00	25	19.15	17.00	0.050	0.695	0.072
	1930-1995	17.5	8.01	10.00	25	19.49	17.34	0.054	1.200	0.045
	2110-2155	16.5	8.36	10.00	25	18.14	15.99	0.04	1.200	0.033
UL	663-698	22.5	4.6	8.00	25	25.90	23.75	0.237	0.530	0.447
	698-716	21.5	4.8	8.50	25	25.20	23.05	0.202	0.558	0.362
	776-787	22.5	5.01	8.50	25	25.99	23.84	0.242	0.622	0.389
	824-849	23.5	5.35	8.50	25	26.65	24.50	0.282	0.659	0.428
	1850-1915	26.0	8.01	9.00	25	26.99	24.84	0.305	1.200	0.254
	1710-1755	26.0	7.45	9.00	25	27.55	25.40	0.347	1.200	0.289
Sum of ratio = Wi-Fi + Booster UL + Booster DL										0.813

Note1: This device can not operate simultaneously in BT and WIFI.

Note2: ERP=EIRP-2.15dB

*The EUT contains a certified module (FCC ID: 2AC7Z-ESP32WROVERB) According to the MPE reports of FCC ID: 2AC7Z-ESP32WROVERB, Wi-Fi and Bluetooth can't transmit simultaneously

Conclusion:

Therefore, the worst-case situation is 0.794 (Sum of Ratios), which is less than "1". This confirmed that the device compliance with FCC RF exposure requirements.

PRO25T-6S-BTW/PRO20T-6S-BTW to maintain compliance with the FCC's RF exposure guidelines, place the equipment at least 25cm from nearby persons.

----- End of the Report -----

Important

- (1) The test report is invalid without the official stamp of CVC;
- (2) Any part photocopies of the test report are forbidden without the written permission from CVC;
- (3) The test report is invalid without the signatures of Approval and Reviewer;
- (4) The test report is invalid if altered;
- (5) Objections to the test report must be submitted to CVC within 15 days.
- (6) Generally, commission test is responsible for the tested samples only.
- (7) As for the test result “-” or “N” means “not applicable”, “/” means “not test”, “P” means “pass” and “F” means “fail”

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