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Report No.: 2210TW2602-U2
Report Version: 1.0
Issue Date: 2022-12-14

RF Exposure Evaluation Declaration

FCC ID : HLEMS852PW
Applicant : Unitech Electronics Co., Ltd.
Application Type : Certification
Product : Wireless 2D Imager Scanner
Model No. : MS852P
Brand Name : unitech
FCC Rule Part(s) : Part 2.1093 (Portable)
Test Procedure(s) : KDB 447498 D01v06
Received Date : October 03, 2022
Test Date : December 08, 2022

Reviewed By : 
(Paddy Chen)

Approved By : 
(Chenz Ker)



The test results relate only to the samples tested.

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report. Test results reported herein relate only to the item(s) tested.

The test report shall not be reproduced except in full without the written approval of MRT Technology (Taiwan) Co., Ltd.

Revision History

Report No.	Version	Description	Issue Date	Note
2210TW2602-U2	1.0	Original Report	2022-12-14	

1. PRODUCT INFORMATION

1.1. Equipment Description

Product Name	Wireless 2D Imager Scanner
Model No.	MS852P
Brand Name	unitech
Operating Frequency	2.4G
Modulation Type	GFSK

1.2. Antenna Description

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	ACX	AT8010-E2R9HAA	Chip	2.5dBi

2. MAXIMUM PERMISSIBLE EXPOSURE (MPE)

2.1. FCC Limits

According to FCC KDB 447498 Section 4.3 - General SAR test exclusion guidance

For 100 MHz to 6 GHz and test separation distances ≤ 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0 \text{ for 1-g SAR, and } \leq 7.5 \text{ for 10-g extremity SAR,}$$

where

1. $f(\text{GHz})$ is the RF channel transmit frequency in GHz
2. Power and distance are rounded to the nearest mW and mm before calculation
3. The result is rounded to one decimal place for comparison
4. The values 3.0 and 7.5 are referred to as numeric thresholds in step b) below

The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm, and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm according to 4.1 f) is applied to determine SAR test exclusion.

2.2. Test Result

Mode	Frequency Band (MHz)	Average Output Power (dBm)	Output Power (mW)	FCC Extremity SAR Test Exclusion Threshold (mW)
2.4G	2410~2400	-4.67	0.34	10

So, this device can complies the SAR test exclusion.

_____ The End _____