



Test report issued under the responsibility of:
EMITECH MONTPELLIER laboratory
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RF EXPOSURE TEST REPORT

KDB 447498 D01 V06
RSS-102 - Issue 5, March 2015

Company: **ENLESS WIRELESS**
Address.....: 45 TER AVENUE DE VERDUN
33520 BRUGES
FRANCE

Test item description: **LoRa temperature & humidity wireless transmitter**
Trade Mark: ENLESS WIRELESS
Manufacturer.....: ENLESS WIRELESS
Model/Type reference.....: 600138402 / TX PULSE LED 600-138
FCC ID.....: 2BEZP600138
IC: 32107-600138
Ratings.....: 3.6 Vdc to 3.8 Vdc

Testing Laboratory: **EMITECH MONTPELLIER laboratory**
Address.....: 145 rue de Massacan
34740 VENDARGUES
FRANCE

Report Reference No: **RE-EVE-23B292-3A**
Test procedure: FCC IC Certification
Diffusion.....: Mr PETIT
Applicant's name: ENLESS WIRELESS
Date of issue.....: July 19, 2024
Total number of pages.....: 10
Revision: 0
Compiled by.....: Olivier HEYER
Approved by (+ signature): David MONTAULON (Technical Manager)



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This document is the result of testing a specimen or a sample of the product submitted. It does not imply an assessment of the conformity of
the whole manufactured products of the tested sample.*

REPORT INDEX:

1. GENERAL INFORMATIONS	3
2. REFERENCE DOCUMENT(S)	4
3. EQUIPMENT TECHNICAL DESCRIPTION	5
3.1. TEST CONDITIONS	5
3.2. E.U.T. MARKING PLATE	5
3.3. E.U.T. GENERAL VIEW	6
3.4. E.U.T. FRONT VIEW	6
3.5. E.U.T. BACK VIEW	7
3.6. E.U.T. INTERNAL VIEW & ELECTRONIC BOARD	7
3.7. E.U.T. MECHANICAL AND ELECTRICAL DESIGN	8
3.8. E.U.T. INPUT/OUTPUT PORTS	8
3.9. EUT RADIO SPECIFICATIONS	9
4. RF EXPOSURE	10
4.1. DSSS MODE	10
4.2. FHSS MODE	10

REVISION HISTORY:

Revision	Date	Modified pages	Modifications
0	July 19, 2024	/	Creation

1. GENERAL INFORMATION

This document submits the results of Radio tests performed on the equipment **Connected measuring device TX PULSE LED 600-138** (denominated hereafter E.U.T.: equipment under test) according to document(s) listed in §2 of this test report.

TESTING PROCEDURE AND TESTING LOCATION:					
Testing Location : EMITECH MONTPELLIER laboratory Address : 145 rue de Massacan 34740 VENDARGUES FRANCE Test procedure : FCC IC Certification Tested by : Morgan PATEY Test supervisor : None Date of receipt of test item : N/A Date (s) of performance of tests : From November 22 nd of 2023 to January 10 th of 2024					
APPLICANT'S GENERAL INFORMATION:					
Company name : ENLESS WIRELESS Company address : 45 TER AVENUE DE VERDUN 33520 BRUGES FRANCE Person(s) present during the tests : No representative for company attended the tests. Responsible : Mr PETIT					
GENERAL REMARKS:					
The information in italics is declared by the manufacturer and is under his responsibility The test results presented in this report relate only to the object tested. The results contained in this report reflect the results for this particular model and serial number. It is the responsibility of the manufacturer to ensure that all production models meet the intent of the requirements detailed within this report. "(see Enclosure #)" refers to additional information appended to the report. "(see appended table)" refers to a table appended to the report. Throughout this report the decimal separator is point.					
POSSIBLE TEST CASE VERDICTS:					
Test case does not apply to the test object .: N/A Test case not performed : N/P Test object does meet the requirement : P (Pass) Test object does not meet the requirement : F (Fail)					
DEFINITIONS AND ABBREVIATIONS:					
E.U.T.	Equipment Under Test	AE	Ancillary Equipment	Pk	Peak detector
RBW	Resolution BandWidth	VBW	Video BandWidth	QP	Quasi-peak detector
FSOATS	Free Space Open Area Test Site	FAR	Full Anechoic Room	Av	Average detector
VP	Vertical Polarization	HP	Horizontal Polarization	RMS	Root Mean Square
RF	Radio Frequency	N.T.R	Nothing To Report	N/C	Not Communicated
SAC	Semi Anechoic Chamber				

2. REFERENCE DOCUMENT(S)

NORMATIVE REFERENCES:

The following referenced documents are necessary for the application of the present test report.

FCC 47 CFR PART 15

Code of federal regulations – Title 47 telecommunication

Part 15- Radio frequency devices

KDB 447498 D01 v06

RF exposure procedures and equipment authorization policies for mobile and portable devices.

RSS-102 - Issue 5, March 2018

Radio Frequency (RF) Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands)

RR-EVE-23B292-5A and -6A

Radio Test Reports Emitech.

Although the product standard uses obsolete technical standards, the latest versions of standards achievable by the laboratory will be used for testing.

INFORMATIVE REFERENCES:

The following referenced documents are not necessary for the application of the present test report but they assist the user with regard to a particular subject area.

3. EQUIPMENT TECHNICAL DESCRIPTION

3.1. Test Conditions

Test item description. : LoRa wireless transmitter
Model/Type reference..... : 600138402 / TX PULSE LED 600-138
Trade Mark. : ENLESS WIRELESS
Serial number (S/N)..... : Not communicated
Part number (P/N). : Not communicated
Software version..... : *Not communicated*
Firmware version..... : *Not communicated*
Type of sample..... : Standard equipment
Function(s)..... : Not communicated
Manufacturer name. : ENLESS WIRELESS
Address. : 45 TER AVENUE DE VERDUN
33520 BRUGES
FRANCE

General product information:

N/A

3.2. E.U.T. Marking plate



3.3.E.U.T. General view



3.4.E.U.T. Front view



3.5.E.U.T. Back view



3.6.E.U.T. Internal view & Electronic board



3.7.E.U.T. Mechanical and Electrical Design

Power supply. : 3.6 VDC
Power supply range..... : 3.6 Vdc to 3.8 Vdc
Power type..... : Battery powered
Power (W)..... : Not communicated
Nominal current (A). : Not communicated
Dimensions (L x W x H) (m). : 0.118 x 0.079 x 0.048
Weight (kg). : 0.300
Temperature range (°C). : -25 to +55
Ground bounding strap..... : No

Comments:

N/A

3.8.E.U.T. Input/Output ports

TX PULSE LED 600-138



Internal
Battery



RF
antenna



PORT	NAME	TYPE	LENGTH	CABLE TYPE	COMMENTS
0	Main frame	N/E	N/A	Plastic	N/A
1	Internal Battery	DC	N/A	N/A	3.6 Vdc
2	RF antenna	RF	N/A	N/A	915 MHz

AC/DC : AC/DC Converter port

I/O: Input or Output port

N/E: Non Electrical port

AC.....: Alternative current port

TP: Telecommunication port

DC.....: Direct current port

RF.....: Radio frequency port

3.9. EUT Radio Specifications

a) GENERAL INFORMATIONS		
According to manufacturer's declarations :		
EUT type.....	Transceiver	
Technology	LoRa	
Environmental profile.....	Data transmissions	
Temperature range.....	-25°C to +55°C	
Antenna type	Integrated	
Antenna Gain.....	Not communicated	
Comments:		
N/A		
b) TRANSMITTER PARAMETERS (Tx)		
	DSSS Mode	FHSS Mode
Frequency bands.....	902 MHz to 928 MHz	902 MHz to 928 MHz
RF Power.....	25 mw	25 mw
Number of channels / Separation	8 channels / 1.6MHz	64 channels / 200kHz
Modulation type	LoRa	LoRa
Duty cycle	Not communicated	Not communicated
Tested frequency.....	903.0 MHz	902.3 MHz
	907.8 MHz	908.5 MHz
	914.2 MHz	914.9 MHz
c) RECEIVER PARAMETERS (Rx)		
Frequency bands.....	902 MHz to 928 MHz	902 MHz to 928 MHz
Bandwidth	Not communicated	Not communicated

4. RF EXPOSURE

4.1. DSSS Mode

Maximum EIRP = 7.05 dBm (5.07 mW) at 903 MHz (see Radio test report referenced in §2)

For USA

In accordance with KDB 447498 D01 General RF Exposure Guidance v06 Appendix A, as EIRP is lower than 15.98 mW at 903 MHz, SAR exemption for FCC can be considered for a distance ≤ 5 cm.

It is therefore not necessary to carry out measurements to assess human exposure to radiofrequencies.

For Canada

In accordance with RSS-102, Issue 5, Section 2.5.1., as EIRP is lower than 16.36 mW at 903 MHz, SAR exemption for ISED can be considered for a distance ≤ 5 mm.

It is therefore not necessary to carry out measurements to assess human exposure to radiofrequencies.

4.2. FHSS Mode

Maximum EIRP = 9.32 dBm (8.55 mW) at 914.9 MHz (see Radio test report referenced in §2)

For USA

In accordance with KDB 447498 D01 General RF Exposure Guidance v06 Appendix A, as EIRP is lower than 15.90 mW at 914.9 MHz, SAR exemption for FCC can be considered for a distance ≤ 5 cm.

It is therefore not necessary to carry out measurements to assess human exposure to radiofrequencies.

For Canada

In accordance with RSS-102, Issue 5, Section 2.5.1., as EIRP is lower than 16.25 mW at 914.9 MHz, SAR exemption for ISED can be considered for a distance ≤ 5 mm.

It is therefore not necessary to carry out measurements to assess human exposure to radiofrequencies.

●●● End of test report ●●●