REM-EMIESS24A523TEX-03Av0

MPE test report

According to the standard:

CFR 47 FCC PART 15

Equipment under test:

TPMS-IR21

FCC ID: *2BCPN-IR21*

Company:

TEXYS INTERNATIONAL

Distribution: Mr DAGNET Thibault **(Company: TEXYS INTERNATIONAL)**

Number of pages: 5

Ed.	Date	Modified Page(s)	Technical Verification and Quality Approval Name and Function / Visa
0	7-Jun-24	Creation	J.C. BOGA, Laboratories Manager

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DESIGNATION OF PRODUCT: ***TPMS-IR21***

Serial number (S/N): *U23052490*

Reference / model (P/N): *TPMS-IR21*

Software version: *V1.06*

MANUFACTURER: Texys Internationnal

COMPANY SUBMITTING THE PRODUCT:

Company: Texys Internationnal

Address: ZA des Chamonds 16 rue Edouard Branly
58640 Varennes-Vauzelles
FRANCE

Responsible: Mr DAGNET Thibault

DATE(S) OF TEST: From 8-Apr-24 to 26-Apr-24

TESTING LOCATION: EMITECH LYON laboratory at CHASSIEU (69) FRANCE

FCC Accredited under US-EU MRA Designation Number: FR0013
Test Firm Registration Number: 807590

ISED Accredited under CANADA-EU MRA Designation Number: FR0007
Industry Canada Registration Number: 4379D

TESTED BY: T. LEDRESSEUR **VISA:**

WRITTEN BY: T. LEDRESSEUR

CONTENTS

REVISIONS HISTORY

Revision	Date	Modified pages	Modifications
0	**7-Jun-24**	/	Creation

1. INTRODUCTION

This report presents the results of radio test carried out on the following radio equipment: ***TPMS-IR21***, in accordance with normative reference.

The equipment under test integrates:

- SRD emitter (433.98MHz).
- RFID receiver (125 kHz)

2. PRODUCT DESCRIPTION

Class:	B
Utilization:	TPMS Sensor system
Antenna type and gain:	integral antenna (unknown gain)
Operating frequency range:	433.98
Number of channels:	1
Channel spacing:	Not concerned
Modulation:	2-GFSK
Power source:	Internal battery 3.6 Vdc

Power level, frequency range and channels characteristics are not user adjustable.
The details pictures of the product and the circuit boards are joined with this file.

Power mode	Condition	Data sent (TPMS-RS21)	Data sent (TPMS-IR21)
Storage	Deflated tyre	No Transmission	No Transmission
Stationary, cold wheel	Inflated tyre, no movement, Temperature <= 50°C	Every 10 seconds: AT, BT, P, RH	Every 10 seconds: AT, BT, P, RH
Stationary, hot wheel	Inflated tyre, no movement, Temperature > 50°C	Every 10 seconds: AT, BT, P, RH	Every 10 seconds: AT, BT, P, RH, RT, TT
Moving	Inflated tyre, movement, Temperature > 50°C	Every 1 second: AT, BT, P, RH	Every 1 second: AT, BT, P, RH, RT, TT
Transient	Puncture detected	Every 0.5 second: AT, BT, P, RH	Every 0.5 second: AT, BT, P, RH, RT, TT

3. NORMATIVE REFERENCE

The standards and testing methods related throughout this report are those listed below.
They are applied on the whole test report even though the extensions (version, date and amendment) are not repeated.

CFR 47 (2024)	Radio Frequency Devices
ANSI C63.10	2013 Procedures for ComplianceTesting of Unlicensed Wireless Devices.
447498 D04 Interim General RF Exposure Guidance v01	RF Exposure Pocedures and Equipment Authorization Policies for Mobile and Portable Devices

4. RF EXPOSURE

In accordance with KDB 447498 D04 Interim General RF Exposure Guidance v01, paragraph 1.4.2 :

Maximum Permissive Exemption according paragraph 1.1310(d)(2) of CFR 47 FCC Part 15

Maximum measured power = 66.14 dBµV/m = 0.00123 mW at 433.98 MHz
with $P = (E \times d)^2 / (30 \times Gp)$ with d = 3 m and Gp = 1

PSD= $EIRP/(4*\pi*R^2)$

- ⇨ $0.00123/(4*\pi*(20\ cm)^2)$= **0.00000025 mW/cm²**
- ⇨ **Limit = f / 1500 = 433.98/1500 = 0.28932**

The equipment fulfils the requirements on power density for general population/uncontrolled exposure and therefore fulfils the requirements of 47 CFR §1.1310.