Test Report No.:
FCCSZ2024-0003-H

RF Test Report

FCC ID	:	**2AYHY-CT10X**
EUT	:	**Smart Current Transformer**
MODEL	:	**See Section 2.2**
BRAND NAME	:	**Milesight**
APPLICANT	:	**Xiamen Milesight IoT Co., Ltd.**
Classification of Test	:	**N/A**

CVC Testing Technology (Shenzhen) Co., Ltd.

Client	**Name: Xiamen Milesight IoT Co., Ltd.** **Address: Building C09, Software Park Phase III, Xiamen 361024, Fujian, China**
Manufacturer	**Name: Xiamen Milesight IoT Co., Ltd.** **Address: Building C09, Software Park Phase III, Xiamen 361024, Fujian, China**
Equipment Under Test	**Name: Smart Current Transformer** **Model/Type: See Section 2.2** **Brand: Milesight** **Serial No.: N/A** **Sampe No.: 2-1**

Date of Receipt.	**2024.01.10**	Date of Testing	**2024.01.10～2024.02.22**

Test Specification	**Test Result**
FCC Part 2 (Section 2.1091) **KDB 447498 D04** **IEEE C95.1**	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: 2024.02.23**

Tested by:	Reviewed by:	Approved by:
Cai Jianyu	Huang Meng	Dong Sanbi
Name Signature	Name Signature	Name Signature

Other Aspects: NONE.

Abbreviations:OK, Pass= passed Fail = failed N/A= not applicable EUT= equipment, sample(s) under tested

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FCCSZ2024-0003-H	Original release	2024.02.23

1. GENERAL PRODUCT INFORMATION

PRODUCT	Smart Current Transformer
BRAND	Milesight
MODEL	CT103-915M
ADDITIONAL MODEL	See Section 2.2
POWER SUPPLY	AC 120V/60Hz
OPERATING FREQUENCY	DTS 500kHz, 903MHz~927.5MHz
	Hybrid 125kHz, 902.3MHz~927.8MHz
I/O PORTS	Refer to user's manual
CABLE SUPPLIED	N/A

Remark:

1. For more detailed features description, please refer to the manufacturer's specifications or the User's Manual.
2. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.
3. EUT photo refer to the report (Report NO.: FCCSZ2024-0003-EUT).

2. ADDITIONAL MODEL/TYPE

Main Model No.	Serial Model No.	Difference
CT103-915M	NO103-915M, CT103-9M,NO103-9M	only differences are the model no and appearance silkprint.
	CT101-915M,NO101-915M, CT101-9M,NO101-9M	1.Main Model No and Serial Model No only differences are the external Current Transformer. 2.Serial Model only differences are the model no and appearance silkprint.
	CT105-915M,NO105-915M, CT107-915M,NO107-915M, CT109-915M,NO109-915M, CT110-915M,NO110-915M, CT301-915M,NO301-915M, CT303-915M,NO303-915M, CT305-915M,NO305-915M, CT310-915M,NO310-915M, CT315-915M,NO315-915M, CT320-915M,NO320-915M, CT325-915M,NO325-915M, CT330-915M,NO330-915M,	1.Main Model No and Serial Model No. only differences are the external Current Transformer. 2.Serial Model only differences are the model no and appearance silkprint.

	CT335-915M,NO335-915M, CT340-915M,NO340-915M, CT105-9M,NO105-9M, CT107-9M,NO107-9M, CT109-9M,NO109-9M, CT110-9M,NO110-9M, CT301-9M,NO301-9M, CT303-9M,NO303-9M, CT305-9M,NO305-9M, CT310-9M,NO310-9M, CT315-9M,NO315-9M, CT320-9M,NO320-9M, CT325-9M,NO325-9M, CT330-9M,NO330-9M, CT335-9M,NO335-9M, CT340-9M,NO340-9M	

3. RF EXPOSURE LIMIT

(Option B) According to FCC Part2.1091 and FCC Part1.1307b, the available maximum time-averaged power or effective radiated power (ERP), whichever is greater, is less than or equal to the threshold Pth (mW) described in the following formula. This method shall only be used at separation distances (cm) from 0.5 centimeters to 40 centimeters and at frequencies from 0.3 GHz to 6 GHz (inclusive). P is given by:

$$P_{\text{th}}\,(\text{mW}) = \begin{cases} ERP_{20\text{ cm}}(d/20\text{ cm})^{x} & d \le 20\text{ cm} \\ ERP_{20\text{ cm}} & 20\text{ cm} < d \le 40\text{ cm} \end{cases}$$

Where：

$$x = -\log_{10}\left(\frac{60}{ERP_{20\text{ cm}}\sqrt{f}}\right)$$

and f is in GHz;
and

$$P_{\text{th}}\,(\text{mW}) = ERP_{20\text{ cm}}\,(\text{mW}) = \begin{cases} 2040f & 0.3\text{ GHz} \le f < 1.5\text{ GHz} \\ 3060 & 1.5\text{ GHz} \le f \le 6\text{ GHz} \end{cases}$$

4. 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**.

5. ANTENNA GAIN

The antennas provided to the EUT, please refer to the following table:

Transmitter Circuit	Peak Gain (dBi)	Antenna Type
LORA	3.73	External Antenna

This is provided by the manufacturer. The laboratory is not responsible for technical data provided by the customer.

6. CALCULATION RESULT OF MAXIMUM CONDUCTED AV POWER

The measured conducted Average Power

Mode	Frequency (MHz)	Target Power (dBm)	Tolerance (dBm)	Lower Tolerance (dBm)	Upper Tolerance (dBm)
LORA	902.3MHz~927.8MHz	3	+-1	2	4

The tuned conducted Average Power (declared by client)

Technology	Maximum conducted power (dBm)	Maximum Antenna Gain (dBi)	ERP (dBm)	ERP (mW)	Distance (cm)	Part1.1307b Threshold (mW)	Verify
LORA	4	3.73	5.58	3.61	20	1840.692	PASS

------ 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”

The test data and test results given in this test report should only be used for purposes of scientific research, teaching and internal quality control when the CMA symbol is not presented.

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