

TEST REPORT

FCC ID. :	2AUCLLM-1000	
Test Report No..... :	TCT220608E037	
Date of issue..... :	Oct. 09, 2022	
Testing laboratory	SHENZHEN TONGCE TESTING LAB	
Testing location/ address:	2101 & 2201, Zhenchang Factory Renshan Industrial Zone, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, 518103, People's Republic of China	
Applicant's name..... :	FX Technology Limited	
Address..... :	2 Stone Buildings, Lincoln's Inn, London WC2A 3TH, United Kingdom	
Manufacturer's name ... :	FX Technology Limited	
Address..... :	2 Stone Buildings, Lincoln's Inn, London WC2A 3TH, United Kingdom	
Standard(s)	FCC CFR Title 47 Part 1.1307 KDB 447498 D04 Interim General RF Exposure Guidance v01	
Product Name..... :	Linxdot Concentrator Module	
Trade Mark	Linxdot	
Model/Type reference..... :	LM-1000	
Rating(s)..... :	DC 3.3V	
Date of receipt of test item	Jun. 08, 2022	
Date (s) of performance of test..... :	Jun. 08, 2022 - Oct. 09, 2022	
Tested by (+signature) ... :	Aaron MO	
Check by (+signature).... :	Beryl ZHAO	
Approved by (+signature):	Tomsin	

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1. General Product Information

1.1. EUT description

Product Name.....:	Linxdot Concentrator Module
Model/Type reference.....:	LM-1000
Sample Number.....:	TCT220608E008-0101
Operation Frequency	125KHz: 902.3MHz~914.9MHz 500KHz: 923.3MHz~927.5MHz
Modulation Type	LoRa
Antenna Type.....:	External Antenna
Antenna Gain.....:	2dBi
Rating(s).....:	DC 3.3V

Note: The antenna gain listed in this report is provided by applicant, and the test laboratory is not responsible for this parameter.

1.2. Model(s) list

None.

2. General Information

2.1. Test environment and mode

Item	Normal condition
Temperature	+25°C
Voltage	AC 120V/60Hz
Humidity	56%
Atmospheric Pressure:	1008 mbar
Test Mode:	
Engineering mode:	Keep the EUT in continuous transmitting by select channel

2.2. Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Equipment	Model No.	Serial No.	FCC ID	Trade Name
/	/	/	/	/

Note:

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.
3. For conducted measurements (Output Power, 20dB Occupied Bandwidth, Carrier Frequencies Separation, Hopping Channel Number, Dwell Time, Spurious Emissions), the antenna of EUT is connected to the test equipment via temporary antenna connector, the antenna connector is soldered on the antenna port of EUT, and the temporary antenna connector is listed in the Test Instruments.

3. Facilities and Accreditations

3.1. Facilities

The test facility is recognized, certified, or accredited by the following organizations:

- FCC - Registration No.: 645098

SHENZHEN TONGCE TESTING LAB

Designation Number: CN1205

The testing lab has been registered and fully described in a report with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files.

- IC - Registration No.: 10668A-1

SHENZHEN TONGCE TESTING LAB

CAB identifier: CN0031

The testing lab has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing.

3.2. Location

SHENZHEN TONGCE TESTING LAB

Address: 2101 & 2201, Zhenchang Factory Renshan Industrial Zone, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, 518103, People's Republic of China

TEL: +86-755-27673339

4. Test Results and Measurement Data

According to §1.1307(b), systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

Remark: 1) **For LoRa-DSS:** The maximum output power for antenna is 11.54dBm (14.26mW) at 914.9MHz, 2dBi antenna gain(with 1.58 numeric antenna gain.)

For LoRa-DTS: The maximum output power for antenna is 10.60dBm (11.48mW) at 923.3MHz, 2dBi antenna gain(with 1.58 numeric antenna gain.)

- 2) For mobile or fixed location transmitters, no SAR consideration applied. The minimum separation generally be used is at least 20cm, even if the calculation indicate that the MPE distance would be lesser.

Calculation:

Given $E = \frac{\sqrt{30 \cdot P \cdot G}}{d}$ & $S = \frac{E^2}{3770}$

Where E = Field strength in Volts / meter

P = Power in Watts

G = Numeric antenna gain

d = Distance in meters

S = Power density in milliwatts / square centimeter

Substituting the MPE safe distance using $d=20\text{cm}$ into above equation.

Yields: $S=0.000199 \cdot P \cdot G$

Mode	Power(mW)	numeric antenna gain	Power density (mW/cm ²)	Limit (mW/cm ²)	Result
LoRa-DSS	14.26	1.58	0.004484	1.0	PASS
LoRa-DTS	11.48	1.58	0.003610		

Result:

Base on the calculation value, No SAR measurement is required.

*******END OF REPORT*******