

#### FCC RF EXPOSURE REPORT

For

#### Repeater

**MODEL NUMBER: CT103** 

FCC ID: 2AQPUCT103

REPORT NUMBER: 4788510983.1-2

**ISSUE DATE: July 31, 2018** 

#### Prepared for

Lin Man Power Technology Inc., No.6 3rd street, Meridian Industrial Complex Balibago, Sta. Rosa City, Laguna, Philippine.

Prepared by

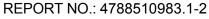
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# **Revision History**

Rev.	Issue Date	Revisions	Revised By
	07/31/2018	Initial Issue	







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## 1. ATTESTATION OF TEST RESULTS

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Company Name: Lin Man Power Technology Inc.,

Address: No.6 3rd street, Meridian Industrial Complex Balibago, Sta. Rosa

City, Laguna, Philippine.

**Manufacturer Information** 

Company Name: Lin Man Power Technology Inc.,

Address: No.6 3rd street, Meridian Industrial Complex Balibago, Sta. Rosa

City, Laguna, Philippine.

**EUT Description** 

Product Name Repeater
Brand Name ENERTEK
Model Name CT103

FCC ID 2AQPUCT103

Date Tested July 9, 2018~ July 25, 2018

#### APPLICABLE STANDARDS

STANDARD TEST RESULTS
FCC 47CFR§2.1091 Complies

Tested By: Check By:

Jacky Jiang

**Engineer Project Associate** 

Shawn Wen

Laboratory Leader

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Approved By:

Stephen Guo

Laboratory Manager



## 2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091.

# 3. FACILITIES AND ACCREDITATION

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	A2LA (Certificate No.: 4102.01)
	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.
	has been assessed and proved to be in compliance with A2LA.
	FCC (FCC Designation No.: CN1187)
	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.
	Has been recognized to perform compliance testing on equipment subject
	to the Commission's Delcaration of Conformity (DoC) and Certification
	rules
Accreditation	IC(Company No.: 21320)
Certificate	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.
Certificate	has been registered and fully described in a report filed with ISED. The
	Company Number is 21320.
	VCCI (Registration No.: G-20019, R-20004, C-20012 and T-20011)
	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.
	has been assessed and proved to be in compliance with VCCI, the
	Membership No. is 3793.
	Facility Name:
	Chamber D, the VCCI registration No. is G-20019 and R-20004
	Shielding Room B, the VCCI registration No. is C-20012 and T-20011

Note 1: All tests measurement facilities use to collect the measurement data are located at Building 10, Innovation Technology Park, Song Shan Lake Hi tech Development Zone, Dongguan, 523808, China

Note 2: The test anechoic chamber in UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch had been calibrated and compared to the open field sites and the test anechoic chamber is shown to be equivalent to or worst case from the open field site.

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# 4. REQUIREMENT

### **LIMIT AND CALCULATION METHOD**

Systems operating under the provisions of FCC 47 CFR section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as mobile device whereby a distance of 0.2m normally can be maintained between the user and the device, and below RF Permissible Exposure limit shall comply with. Limits for General Population/Uncontrolled Exposure

### **RF EXPOSURE LIMIT**

Frequency Range (MHz)	E-field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm²)	Averaging Time  E ²,  H ² or S (Minutes)
0.3 1.34	614	1.63	(100)*	30
1.34 30	824/f	2.19/f	(180/f <sup>2</sup> )*	30
30 300	27.5	0.073	0.2	30
300 1500			f/1500	30
1500 100,000			1.0	30

### **CALCULATION METHOD**

S=PG/4πR<sup>2</sup>

Where:

S=power density

P=power input to antenna

G=power gain of the antenna in the direction of interest relative to an isotropic radiator

R=distance to the center of radiation of the antenna



# **CALCULATED RESULTS**

Lora Mode					
Frequency	Output Power	Output Power	Power Density	Limit	Test Result
MHz	dBm	mW	mW/cm <sup>2</sup>	mW/cm <sup>2</sup>	
915.25- 917.75	12.5	17.78	0.004	0.612	Complies

Note: 1. Antenna Gain=0dBi (Numeric 1),  $\pi$ =3.141.

- 2. The Power comes from turn up power which declared by customer.
- 3. The minimum separation distance of the device is greater than 20 cm.
- 4. Calculate by WORST-CASE mode.
- 5. Owing to the maximum Calculated Result is below the limit, so it deemed to comply with the basic restrictions without testing which means that no SAR is required.

# **END OF REPORT**