



**FCC RF EXPOSURE REPORT**

*For*

**Repeater**

**MODEL NUMBER: CT103**

**FCC ID: 2AQPUCT103**

**REPORT NUMBER: 4788510983.1-2**

**ISSUE DATE: July 31, 2018**

*Prepared for*

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Philippine.**

*Prepared by*

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Revision History

<u>Rev.</u>	<u>Issue Date</u>	<u>Revisions</u>	<u>Revised By</u>
--	07/31/2018	Initial Issue	



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# 1. ATTESTATION OF TEST RESULTS

## Applicant Information

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:

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Approved By:

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## 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

Accreditation Certificate	<p><b>A2LA (Certificate No.: 4102.01)</b>          UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with A2LA.</p> <p><b>FCC (FCC Designation No.: CN1187)</b>          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</p> <p><b>IC(Company No.: 21320)</b>          UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been registered and fully described in a report filed with ISED. The Company Number is 21320.</p> <p><b>VCCI (Registration No.: G-20019, R-20004, C-20012 and T-20011)</b>          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.</p> <p><u>Facility Name:</u>          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</p>
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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.



## 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/cm <sup>2</sup> )	Averaging Time  E  <sup>2</sup> ,  H  <sup>2</sup> 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

$$S = PG / 4\pi R^2$$

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**