



FCC RF EXPOSURE REPORT

For

Solar Powered Trailer and Assert Tracker

MODEL NUMBER: TT601-LM0Q-GL

FCC ID: 2AP3P2018TT600

REPORT NUMBER: 4788458567-3

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Prepared for

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Prepared by

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Revision History

Rev.	Issue Date	Revisions	Revised By
--	06/14/2018	Initial Issue	



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1. ATTESTATION OF TEST RESULTS

Applicant Information

Company Name: Flextronics (Shanghai) Co., Ltd
Address: 4F, Bldg. 10, No. 3000 Longdong Ave., Pudong New District, Shanghai 201203

Manufacturer Information

Company Name: Flex Industrial, Ltd.
Address: Level 3, Alexander House, 35 Cybercity, Ebene, Mauritius

Factory Information

Company Name: Flextronics Technology (Nanjing) Co., Ltd
Address: No.99 Zhuang Pai Rd., Jiangning Development Zone, Nanjing, Jiangsu, China · 211100

EUT Description

EUT Name: Solar Powered Trailer and Asset Tracker
Model: TT601-LM0Q-GL
Series Model: TT600-LM0Q-GL/TT603-LM0Q-GL
Model Different: TT600-LM0Q-GL: without connector, with Bluetooth, no ultracap
TT601-LM0Q-GL: with connector, with Bluetooth, no ultracap
TT603-LM0Q-GL: with connector(different pins with TT601-LM0Q-GL), with Bluetooth, no ultracap
Brand Name: /
Sample Status: Normal
Sample Received Date: June 04, 2018
Date of Tested: June 05, 2018 ~ June 11, 2018

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
FCC 47CFR§2.1091	Complies



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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	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. IAS (Lab Code: TL-702) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has demonstrated compliance with ISO/IEC Standard 17025:2005, General requirements for the competence of testing and calibration laboratories 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 Declaration of Conformity (DoC) and Certification rules IC(Company No.: 21320) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been registered and fully described in a report filed with Industry Canada. 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
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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/cm ²)	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 ²)*	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

BLE Mode					
Frequency	Output Power	Output Power	Power Density	Limit	Test Result
MHz	dBm	mW	mW/cm ²	mW/cm ²	--
2402~2480	7.5	5.62	0.0021	1.0	Complies

GPRS Mode					
Band	Output Power	Output Power	Power Density	Limit	Test Result
/	dBm	mW	mW/cm ²	mW/cm ²	--
GPRS 850MHz	25.9	389.05	0.1945	0.55	Complies

Note: 1. Antenna Gain=2.80dBi (Numeric 1.91) for BT; Antenna Gain=4dBi (Numeric 2.51) for GPRS 850, $\pi=3.141$.

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. All of transmitter function can Tx simultaneously for the EUT, so the combined Power Density is $0.1945+0.0021=0.1966\text{mW/cm}^2$ less than 0.55.

5. Calculate by WORST-CASE mode.

END OF REPORT