



CTC Laboratories, Inc.

Room 101 Building B, No. 7, Lanqing 1st Road, Luhua Community, Guanhu Subdistrict, Longhua District, Shenzhen, Guangdong, China
Tel: +86-755- 27521059 Fax: +86-755- 27521011 Http://www.sz-ctc.org.cn

Maximum Permissible Exposure Evaluation

FCC ID: 2BB6E-GLMX23A04

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) Radiation as specified in §1.1307(b)

EUT Specification

Product Name:	Smart Travel Adapter
Trade Mark:	GlocalMe
Model/Type reference:	GLMX23A04
Listed Model(s):	/
Frequency band (Operating)	WIFI: 2412MHz~2462MHz GSM 850: UL: 824MHz~849MHz, DL: 869MHz~894MHz PCS 1900: UL: 1850MHz~1910, DL: 1930MHz~1990MHz WCDMA Band II: UL: 1852.4MHz~1907.6MHz, DL: 1932.6MHz~1987.4MHz WCDMA Band IV: UL: 1712.4MHz~1752.6MHz, DL: 2112.6MHz~2152.4MHz WCDMA Band V: UL: 826.4MHz~846.6MHz, DL: 871.6MHz~1891.4MHz LTE FDD Band 2: UL: 1850.7MHz~1909.3MHz, DL: 1930.7MHz~1989.3MHz LTE FDD Band 4: UL: 1710.7MHz~1754.3MHz, DL: 2110.7MHz~2154.3MHz LTE FDD Band 5: UL: 824.7MHz~848.3MHz, DL: 869.7MHz~893.3MHz LTE FDD Band 7: UL: 2502.5MHz~2567.5MHz, DL: 2622.5MHz~2687.5MHz LTE FDD Band 12: UL: 699.7MHz~715.3MHz, DL: 729.7MHz~745.3MHz LTE FDD Band 13: UL: 779.5MHz~784.5MHz, DL: 748.5MHz~751.0MHz LTE FDD Band 17: UL: 706.5MHz~713.5MHz, DL: 736.5MHz~743.5MHz LTE FDD Band 25: UL: 1850.7MHz~1914.3MHz, DL: 1930.7MHz~1994.3MHz LTE FDD Band 26 (814~824MHz): UL: 814MHz~824MHz, DL: 859MHz~869MHz LTE FDD Band 26 (824~849MHz): UL: 824MHz~849MHz, DL: 869MHz~894MHz LTE TDD Band 41: UL: 2498.5MHz~2687.5MHz, DL: 2498.5MHz~2687.5MHz LTE FDD Band 66: UL: 1710.7MHz~1779.3MHz, DL: 2110.7MHz~2179.3MHz
Device category	☐ Portable (<5mm separation) ☒ Mobile (>20cm separation) ☐ Fixed (>20cm separation) ☐ Others ____
Exposure classification	☐ Occupational/Controlled exposure (S=5mW/cm ²) ☒ General Population/Uncontrolled exposure (S=1mW/cm ²)
Antenna diversity	☐ Single antenna ☒ Multiple antennas ☐ Tx diversity ☐ Rx diversity ☐ Tx/Rx diversity
Antenna gain	WIFI: -1.51dBi Max GSM 850: -2.08dBi Max PCS 1900: -0.41dBi Max

CTC Laboratories, Inc.

Room 101 Building B, No. 7, Lanqing 1st Road, Luhua Community, Guanhu Subdistrict, Longhua District, Shenzhen, Guangdong, China
Tel.: (86)755-27521059 Fax: (86)755-27521011 Http://www.sz-ctc.org.cn



For anti-fake verification, please visit the official website of Certification and Accreditation Administration of the People's Republic of China : yz.cnca.cn



	WCDMA Band II: -0.41dBi Max WCDMA Band IV: -1.60dBi Max WCDMA Band V: -2.08dBi Max FDD Band 2: -0.14dBi Max FDD Band 4: -1.60dBi Max FDD Band 5: -2.08dBi Max FDD Band 7: -3.93dBi Max FDD Band 12: 0.98dBi Max FDD Band 13: -1.58dBi Max FDD Band 17: 0.98dBi Max FDD Band 25: -0.14dBi Max FDD Band 26 (814~824MHz): -1.71dBi Max FDD Band 26 (824~849MHz): -2.08dBi Max TDD Band 41: -1.71dBi Max FDD Band 66: -1.60dBi Max
Evaluation applied	☒ MPE Evaluation ☐ SAR Evaluation

Limits for Maximum Permissible Exposure (MPE)

Frequency Range(MHz)	Electric Field Strength(V/m)	Magnetic Field Strength(A/m)	Power Density(mW/cm ²)	Average Time
(A) Limits for Occupational/Control Exposures				
300-1500	--	--	F/300	6
1500-100000	--	--	5	6
(B) Limits for General Population/Uncontrol Exposures				
300-1500	--	--	F/1500	30
1500-100000	--	--	1	30

F = frequency in MHz

Friis transmission formula: $P_d = (P_{out} * G) / (4 * \pi * R^2)$

Where

 P_d = Power density in mW/cm² P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

 π = 3.1416

R = distance between observation point and center of the radiator in cm

P_d the limit of MPE 1mW/cm². If we know the maximum gain of the antenna and total power input to the antenna, through the calculation, We will know the distance where the MPE limit is reached.

Measurement Result

Band	Frequency (MHz)	Antenna Gain (dBi)	Maximum Power (dBm)	Tune up tolerance (dBm)	Max. Tune up Power (dBm)	Power Density at 20cm (mW/cm ²)	Limit (mW/cm ²)	Verdict
802.11b	2437	-1.51	21.60	22±1	23	0.02804	1.000	PASS
802.11g	2437	-1.51	24.13	24±1	25	0.04444	1.000	PASS
802.11n(HT20)	2437	-1.51	24.16	24±1	25	0.04444	1.000	PASS
802.11n(HT40)	2437	-1.51	23.48	23±1	24	0.03530	1.000	PASS
802.11ax(HE20)	2437	-1.51	24.59	24±1	25	0.04444	1.000	PASS
802.11ax(HE40)	2437	-1.51	24.02	24±1	25	0.04444	1.000	PASS
GPRS 850 (1 Tx slot)	848.8	-2.08	31.94	32±1	33	0.24589	0.566	PASS

CTC Laboratories, Inc.

Room 101 Building B, No. 7, Lanqing 1st Road, Luhu Community, Guanhu Subdistrict, Longhua District, Shenzhen, Guangdong, China

Tel.: (86)755-27521059

Fax: (86)755-27521011

Http://www.sz-ctc.org.cn



中国国家认证认可监督管理委员会
Certification and Accreditation Administration of the People's Republic of China

For anti-fake verification, please visit the official website of Certification and Accreditation Administration of the People's Republic of China : yz.cnca.cn



EGPRS 850 (1 Tx slot)	848.8	-2.08	26.52	27±1	28	0.07776	0.566	PASS
GPRS 1900 (1 Tx slot)	1880	-0.41	29.74	30±1	31	0.22790	1.000	PASS
EGPRS 1900 (1 Tx slot)	1909.8	-0.41	26.76	27±1	28	0.11422	1.000	PASS
WCDMA Band II	1907.60	-0.41	23.28	23±1	24	0.04547	1.000	PASS
WCDMA Band IV	1732.60	-1.60	23.77	24±1	25	0.04353	1.000	PASS
WCDMA Band V	826.40	-2.08	23.75	24±1	25	0.03897	0.551	PASS
LTE Band 2	1860	-0.14	24.02	24±1	25	0.06092	1.000	PASS
LTE Band 4	1710.7	-1.60	24.64	25±1	26	0.05480	1.000	PASS
LTE Band 5	824.7	-2.08	22.55	23±1	24	0.03096	0.550	PASS
LTE Band 7	2535	-3.93	23.47	23±1	24	0.02022	1.000	PASS
LTE Band 12	699.7	0.98	23.05	23±1	24	0.06262	0.466	PASS
LTE Band 13	782	-1.58	22.88	23±1	24	0.03473	0.521	PASS
LTE Band 17	706.5	-0.98	23.14	23±1	24	0.03988	0.471	PASS
LTE Band 25	1882.5	-0.14	24.26	24±1	25	0.06092	1.000	PASS
LTE Band 26 (814~824MHz)	815.5	-1.71	23.68	24±1	25	0.04244	0.544	PASS
LTE Band 26 (824~849MHz)	824.7	-2.08	23.28	23±1	24	0.03096	0.550	PASS
LTE Band 41	2685	-1.71	23.88	24±1	25	0.04244	1.000	PASS
LTE Band 66	1745	-1.60	23.60	24±1	25	0.04353	1.000	PASS

The GSM and WLAN can transmit simultaneously

GPRS 850 (1 Tx slot) Power density at 20cm (mW)	WLAN Power density at 20cm (mW)	Total Power density at 20cm(mW)	Limit	Verdict
0.24589	0.04444	0.478874629	1	PASS

Total E-field strength = ((E-field strength)/ (Limit) + (E-field strength)/ (Limit)...) ≤ 1

Note:

For a more detailed features description, Please refer to the RF Test Report.

*****THE END*****