



# FCC RF EXPOSURE REPORT

# FCC ID: QIPBGS12

Project No.	: 1902H007
Equipment	: GSM/GPRS Wireless Module
Model Name	: BGS12
Series Model	: N/A
Applicant	: Gemalto M2M GmbH
Address	: Gemalto M2M GmbH , Siemensdamm 50 Berlin Germany
	Germany

According: : FCC Guidelines for Human Exposure IEEE C95.1 & FCC Part 2.1091



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Certificate # 5123.03





## **1. GENERAL SUMMARY**

Equipment :	GSM/GPRS Wireless Module
Brand Name:	CINTERION
Test Model :	BGS12
Series Model :	N/A
Applicant :	Gemalto M2M GmbH
Manufacturer :	Gemalto M2M GmbH
Address :	Gemalto M2M GmbH , Siemensdamm 50 Berlin Germany
Date of Test :	Mar. 01, 2019 ~ Mar. 12, 2019
Test Sample :	Engineering Sample No.: B190300056
Standards :	FCC Title 47 Part 2.1091, OET Bulletin 65 Supplement C

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc.

The test data, data evaluation, and equipment configuration contained in our test report (Ref No. BTL-FCCP-3-1902H007) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of A2LA according to the ISO/IEC 17025 quality assessment standard and technical standard(s).





## 2. MPE CALCULATION METHOD

Calculation Method of RF Safety Distance:

$$S = \frac{PG}{4\pi r^2} = \frac{EIRP}{4\pi r^2}$$

where:

S = power density

P = power input to the 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

Table for Filed Antenna:

#### For GSM 850

Ant.	Brand	P/N	Antenna Type	Connector	Gain(dBi)
1	N/A	N/A	Internal	N/A	1.0

#### **For PCS 1900**

Ant.	Brand	P/N	Antenna Type	Connector	Gain(dBi)
1	N/A	N/A	Internal	N/A	2.7





# 3. TEST RESULTS

#### For PCS 1900

Max EIRP (dBm)	Max EIRP (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
29.76	946.2372	0.18834	1	Complies

#### For GSM 850

ERP=EIRP-2.15

Max EIRP (dBm)	Max EIRP (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
32.76	1887.9913	0.37579	1	Complies

Note: the calculated distance is 20 cm.

Output power including tune up tolerance.

**End of Test Report**