# FCC MPE TEST REPORT

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|---|---|
| **Project Number** | **: EA1710C-008** |
| **Test Report Number** | **: TR-W1711-030** |
| **Type of Equipment** | **: SCOPE2.0 Plus** |
| **FCC ID** | **: 2AN5BGIS-PAMSC3** |
| **Model Name** | **: GIS-PAMSC3** |
| **Multiple Model Name** | **: N/A** |
| **Applicant** | **: SEMES CO., LTD.** |
| **Address** | **: 77, 4sandan 5-gil, Jiksan-eup Seobuk-gu, Cheonan-si, Chungcheongnam-do, Korea** |
| **Manufacturer** | **: SEMES CO., LTD.** |
| **Address** | **: 77, 4sandan 5-gil, Jiksan-eup Seobuk-gu, Cheonan-si, Chungcheongnam-do, Korea** |
| **Regulation** | **: FCC Part 15 Subpart C 15.247 & Subpart E 15.407** |
| **Total page of Report** | **: 5 Pages** |
| **Date of Receipt** | **: 2017-10-13** |
| **Date of Issue** | **: 2017-11-30** |
| **Test Result** | **: PASS** |

This test report only contains the result of a single test of the sample supplied for the examination.
It is not a generally valid assessment of the features of the respective products of the mass-production.

Prepared by Song, In-young / Senior Engineer _____ (Signature) 2017-11-30 (Date)

Reviewed by Choi, Yeong-min / Technical Manager _____ (Signature) 2017-11-30 (Date)


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## Release Control Record

| Issue Report No. | Issued Date | Revisions | Effect Section |
|---|---|---|---|
| TR-W1711-030 | 2017-11-30 | Initial Release | All |
| | | | |


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# 1. EUT (Equipment Under Test)

## 1.1 General Description

The SEMES CO., LTD., Model GIS-PAMSC3 (referred to as the EUT in this report) is a SCOPE2.0 Plus. The EUT is a device for transferring vibration signal and equipment information to an agent PC through wired/wireless communication. For wireless communication, the EUT has WLAN module has function for 802.11a/b/g, and measure RF output power is as following table..

## 1.2 RF Output Power

| Operating Mode | Channel | Frequency (MHz) | Data rate (Mbps) | Output Power (dBm) |
|---|---|---|---|---|
| 802.11b | Low | 2 412 | 11 | 18.00 |
| | Middle | 2 437 | 11 | 18.05 |
| | High | 2 462 | 11 | 18.09 |
| 802.11g | Low | 2 412 | 54 | 18.90 |
| | Middle | 2 437 | 54 | 18.91 |
| | High | 2 462 | 54 | 19.06 |
| 802.11a (U-NII Band 1) | Low | 5 180 | 54 | 15.78 |
| | Middle | 5 200 | 54 | 15.60 |
| | High | 5 240 | 54 | 15.48 |
| 802.11a (U-NII Band 3) | Low | 5 745 | 54 | 11.63 |
| | Middle | 5 765 | 54 | 12.16 |
| | High | 5 805 | 54 | 12.05 |

## 2. TEST RESULT

According to FCC KDB 447498 D01 General RF Exposure Guidance v06

### 4.3.1. Standalone SAR test exclusion considerations

1) The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] x [√f(GHz)] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR,

where,

f(GHz) is the RF channel transmit frequency in GHz

Power and distance are rounded to the nearest mW and mm before calculation

The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

For the present device, the declared output power is 19.06 dBm. at 802.11g

So, max. power of channel, including tune-up tolerance = 80.54 mW
min. test separation distance = 50 mm
f(GHz) = 2.462

(max. power of channel, including tune-up tolerance, mW )/ (min. test separation distance, mm)] X [√f(GHz)]
= (80.54 / 50) x (√2.462) = 2.5 ≤ 3.0

Hence the SAR Exclusion Threshold condition is satisfied and the SAR evaluation for general population exposure conditions is not required.