



Certification Exhibit

FCC ID: R7PNG0R1X8

FCC Rule Part: 47 CFR Part 2.1091

Project Number: 72197962

Manufacturer: Landis + Gyr Technology, Inc
Model Name: S6-MCM0

RF Exposure

General Information:

Applicant: Landis + Gyr Technology, Inc
 Device Category: Mobile
 Environment: General Population/Uncontrolled Exposure

Technical Information (900MHz– FCC 15.247):

**Antenna Type: Dipole Antenna
 **Total Antenna Gain: 1.26 dBi
 *Maximum Transmitter Conducted Power: 28.58 dBm, 721.11mW
 Maximum System EIRP: 29.84 dBm, 963.83 mW
 Exposure Conditions: 20 centimeters
 *Worst Case from all 900 MHz modes (FHSS/Hybrid/DTS)
 **Declared by the customer

RF Exposure Calculation

Table 1: Device Characteristics

Technical Parameters	Dipole Antenna
Frequency Range (GHz)	0.9022-0.9278
Frequency Range (MHz)	902.2 – 927.8
Separation Distance (cm)	20.00
Separation Distance (m)	0.2000
Antenna Gain (dBi)	1.26
ERP Easily Determined	YES
Conducted Power (dBm)	28.58
Conducted Power (mW)	721.11
Duty Factor (Source-Based) %	100.0
Maximum (Source-Based) Time-Averaged Conducted Power (mW)	721.11
Maximum (Source-Based) Time-Averaged ERP (mW)	587.70
Maximum (Source-Based) Time-Averaged EIRP (mW)	963.83
Maximum Output (mW)	721.11

Test Exemption Criteria

Test exemption is determined by 47 CFR 1.1307(b)(3)(i)(B) where single RF source is exempt if:

The available maximum time-averaged power or effective radiated power (ERP), whichever is greater, is less than or equal to the threshold Pth (mW) described in the following formula. Pth is given by:

$$P_{th} \text{ (mW)} = \begin{cases} ERP_{20 \text{ cm}} (d/20 \text{ cm})^x & d \leq 20 \text{ cm} \\ ERP_{20 \text{ cm}} & 20 \text{ cm} < d \leq 40 \text{ cm} \end{cases}$$

Where

$$x = -\log_{10} \left(\frac{60}{ERP_{20 \text{ cm}} \sqrt{f}} \right) \text{ and } f \text{ is in GHz;}$$

and

$$ERP_{20 \text{ cm}} \text{ (mW)} = \begin{cases} 2040f & 0.3 \text{ GHz} \leq f < 1.5 \text{ GHz} \\ 3060 & 1.5 \text{ GHz} \leq f \leq 6 \text{ GHz} \end{cases}$$

d = the separation distance (cm);

Table 2: 47 CFR 1.1307(b)(3)(i)(B) SAR – Based Exemption Pth (mW)

Technical Parameters	Dipole Antenna
x	1.46
ERP _{20cm} (mW)	1840.49
Maximum Output (mW)	721.107
P _{th} (mW)	1840.488
Exemption	YES