



Certification Exhibit

FCC ID: SDBIDTB007

FCC Rule Part: 47 CFR Part 2.1091

TÜV SÜD Project Number: 72187705

**Manufacturer: Sensus Metering Systems Inc.
Model: IDTB007**

RF Exposure

TÜV SÜD America
5610 West Sligh Ave., Suite 100
Tampa, FL 33634

Phone: 813-284-2715
www.tuv-sud-america.com

General Information:

Applicant: Sensus Metering Systems Inc.
 Device Category: Mobile
 Environment: General Population/Uncontrolled Exposure

Device Characteristics:**Table 1: Device Characteristics and Maximum Output**

Technical Parameters	Device 1
Frequency (GHz)	0.901
Frequency (MHz)	901
Separation Distance (cm)	20
Separation Distance (m)	0.2000
Antenna Gain (dBi)	2
ERP Easily Determined	YES
1-g body or 10-g extremity	Body
Conducted Power (dBm)	31.46
Conducted Power (mW)	1399.59
Duty Factor (Source-Based) %	100
Maximum (Source-Based) Time-Averaged Conducted Power (mW)	1399.59
Maximum (Source-Based) Time-Averaged ERP (mW)	1352.56
Maximum (Source-Based) Time-Averaged EIRP (mW)	2218.20
Maximum Output (mW)	1399.59

Determination of Exemption:

FCC 47 CFR 1.1307(b)(3)(i)(B) SAR-Based Exemption Pth (mW)

The available maximum time-averaged power or effective radiated power (ERP), whichever is greater, is less than or equal to the threshold P_{th} (mW) described in the following formula.

P_{th} is given by:

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

Where

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

And

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

$d = \text{the separation distance (cm)};$

Table 2:Determination of Exemption per FCC 47 CFR 1.1307(b)(3)(i)(B)

Technical Parameters	Device 1
X	1.46
ERP _{20cm} (mW)	1838.04
Maximum Output (mW)	1399.587
P _{th} (mW) (For determining extremity / body)	1838.040
P _{th} (mW)	1838.040
Exemption	YES

Conclusion:

The device meets the exemption requirements in accordance with FCC 47 CFR 1.1307(b)(3)(i)(B).