

RF Exposure Analysis – SAR Test Exemption – CTSN-09S

FCC ID: 2ANX7CTSN

The CTSN-09S equipment operates using a transceiver that operates in the 2400 MHz to 2483.5 MHz ISM band.

The following FCC Rule Parts and Procedures are applicable:

KDB447498 D04 V01 – Interim General RF Exposure Guidance

Part 1.1307(b)(3)(i)(A) - Blanket RF exposure exemption (i)

Part 1.1307(b)(3)(i)(C) - SAR test exemption (ii)

Part 1.1307(b)(3)(i)(B) - SAR test exemption (iii)

For the CTSN-09S

Operating Frequencies: 2407.124992 MHz to 2476.834816 MHz

Declared Maximum Conducted Transmitter Output Power: -8 dBm (0.16 mW)

(including Tune Up tolerance)

Antenna System Gain: -6.0 dBi

Transmitter EIRP = -14.0 dBm (0.04 mW)

As the conducted transmitter output power is higher than the calculated EIRP this figure is compared to the specified exemption limits of Part 1.1307

Evaluation

From Part 1.1307, RF exposure exemption applies if the maximum transmitted power is less than the maximum of the following three criteria:

- i. Less than 1 mw Blanket exemption. $P_{TH} = 0.001 \text{ W} \S1.1307(b)(3)(i)(A)$
- ii. determination of exemption under the MPE-based §1.1307(b)(3)(i)(C), if i) not met
- iii. determination of exemption under the SAR-based §1.1307(b)(3)(i)(B) if both i) and ii) are not met:

Conclusion

The CTSN-09S maximum conducted transmitter output power is less than 1 mW and, therefore, complies with the RF exposure blanket exemption in accordance with §1.1307(b)(3)(i)(A).