

FCC SAR exemption letter according KDB 447498 D01 v06

For Siemens Aktiengesellschaft, Transponder 6GT2700-5DC13 with HW 0615 and SW 2.1.10 with FCC ID SCF4083T01

Declared minimum distance to human body according to customer < 1 mm according external document "MPE Information Requirements_RTLS4083T_FCC_v4" provided by customer.

According to KDB 447498 D01 General RF Exposure Guidance V06 SAR testing can be exempted if the following exclusion threshold are met:

4.3. General SAR test exclusion guidance

4.3.1. Standalone SAR test exclusion considerations

- a) For 100 MHz to 6 GHz and *test separation distances* ≤ 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f_{\text{GHz}}}] \leq 3.0 \text{ for 1-g SAR, and } \leq 7.5 \text{ for 10-g extremity SAR,}^{30} \text{ where}$$

- f_{GHz} is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation³¹
- The result is rounded to one decimal place for comparison
- The values 3.0 and 7.5 are referred to as *numeric thresholds* in step b) below

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 according to 4.1 f) is applied to determine SAR test exclusion.

FCC General SAR test exclusion acc. KDB 447498 D01 v06					
Frequency (MHz)	Max. power incl. Tune-up tolerance (mW)	Threshold 1-g SAR Limit < 3.0	Threshold 10-g SAR Limit < 7.5	1-G SAR Exemption fulfilled	10-g SAR Exemption fulfilled
2405.0	3.9811	1.2348	1.2348	yes	yes
2445.0	3.9811	1.2450	1.2450	yes	yes
2480.0	3.9811	1.2539	1.2539	yes	yes
3919.7	0.1172	0.0464	0.0464	yes	yes
Simultaneous transmission		SUM 1.3003	SUM 1.3003	yes	yes
min. test separation distance (mm)		5			

Test separation of 5mm was chosen as described in the guidance above. The user manual must list the given usage position.

The current version of the exemption letter CETECOM_TR19-1-0106801T06a-C1 replaces the exemption letter CETECOM_TR19-1-0106801T06a dated 2020-07-20. The replaced test report is herewith invalid.