

RF Exposure requirements

Product name	Scan Tool
Model number	GDS Trigger
FCC ID	TMGG1JDDMN001
Radio specification	2.4 GHz Bluetooth transceiver
Antenna	Integral chip antenna
Power source	DC 7 V - DC 35 V

According to the KDB 447498, the following standalone SAR test exclusion was considered to qualify for the SAR test exclusion.

Tx frequency range	2402 MHz - 2480 MHz
Device category	Mobile station
Maximum conducted output power	0.68 mW (-1.66 dBm)
Limit	10 mW (distance = 5 mm)

SAR test exclusion thresholds:

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

MHz	5	10	15	20	25	29	30	35	40	45	50	test separation distance (mm)
2450	10	19	29	38	48	56	57	67	77	86	96	SAR test exclusion threshold (mW)

The source-based time-averaged maximum conducted output power of the RF channel is less than 10 mW, and the minimum separation distance of 5 mm can be achieved. Therefore the transmitter complies with the RF exposure requirements and the SAR is not required.