

RF Exposure requirements

Product name	TPMS Module
Model number	TPMS B/T Adapter
FCC ID	TMGG1TDDMN006
Radio specification	2.4 GHz Bluetooth transceiver
Antenna	2.4 GHz Omni-directional chip antenna
Power source	DC 3.7 V battery

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	Handheld portable device
Maximum conducted output power	0.77 mW (-1.12 dBm)
Limit	10 mW (distance = 5 mm)

RF average power output (measured):

unit: mW

Data rate (packet)	Operating frequency (for Bluetooth device)		
	2402 MHz	2441 MHz	2480 MHz
Basic (DH5)	0.43	0.39	0.25
EDR (2-DH5)	0.76	0.55	0.38
EDR (3-DH5)	0.77	0.57	0.39

SAR test exclusion thresholds:

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