RF EXPOSURE EVALUATION

1. PRODUCT INFORMATION

Product Description	Dual band wireless adapter
Model Name	XHT-6B06, XHT-6B08
FCC ID	2AKC6XHT-WF6E

2. EVALUATION METHOD

According to 447498 D01 General RF Exposure Guidance v05
The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:
[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] ·[√f(GHz)] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR.
Where f(GHz) is the RF channel transmit frequency in GHz
Power and distance are rounded to the nearest mW and mm before calculation

3. CALCULATION

According to the follow transmitter output power (P_t) formula :
$P_t = (E \times d)^2 / (30 \times g_t)$
P_t=transmitter output power in watts
g_t=numeric gain of the transmitting antenna (unitess)
E=electric field strength in V/m
d=measurement distance in meters (m)

For 2.4G WIFI
P_t=8.95dBm=7.85mW
The result for RF exposure evaluation
SAR=(7.85mW /5mm) .[√2.462(GHz)]= 2.46<3.0 for 1-g SAR

For 5G WIFI
P_t=4.24dBm=2.65mW
The result for RF exposure evaluation
SAR=(2.65mW /5mm) .[√5.825(GHz)]=1.28<3.0 for 1-g SAR

Note: The 2.4G and 5G WIFI can not transmit simultaneously.

4. CONCLUSION

The SAR evaluation is not required.