

Maximum Permissive Exposure

FCC ID: XVG500102MC20

EUT: IPTV STB/PVR

M/N: Kamai 7XM; Amulet 7XM; Amulet 7XYzzzzzz; Kamai 7XYzzzzzz

(Where “X, Y” can be 0, 1, 2, 3, 4, 5, 6, 7, 8, a~z, A~Z; zzzzzzzz can be combination of a~z, A~Z, 0~9, “-“, “/”, or blank)

1. According to FCC CFR 47 §1.1310, the criteria listed in the following table shall be used to evaluate the environmental impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b).

Table 1 Limits for Maximum Permissible Exposure

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Average Time (Minutes)
(A) Limits for Occupational / Control Exposures (f = frequency)				
30-300	61.4	0.163	1.0	6
300-1500	---	---	f/300	6
1500-100,000	---	---	5.0	6
(B) Limits for General Population / Uncontrolled Exposures (f = frequency)				
30-300	27.5	0.073	0.2	30
300-1500	---	---	f/1500	30
1500-100,000	---	---	1.0	30

2. MPE Calculation

Sony Corporation declares that the product described above has been evaluated and found to comply with the RF exposure limits for humans, as specified based on ANSI/FCC recommendation.

RF Exposure Calculations: $S = (P * G) / (4 * \pi * r^2)$ or $r = \sqrt{(P * G) / (4 * \pi * S)}$

2.1. Estimation Result

Mode	CH	Frequency (MHz)	PK Output power (dBm)	Output power (mW)	antenna Gain (dBi)	antenna Gain (linear)	MPE (mW/cm ²)
GFSK (DSS)	CH0	2402	7.530	5.66	1.4	1.38	0.00156
	CH39	2441	7.559	5.70	1.4	1.38	0.00157
	CH78	2480	6.650	4.62	1.4	1.38	0.00127
8-DPSK (DSS)	CH0	2402	7.109	5.14	1.4	1.38	0.00141
	CH39	2441	7.010	5.02	1.4	1.38	0.00138
	CH78	2480	5.941	3.93	1.4	1.38	0.00108
GFSK (DTS)	CH0	2402	4.648	2.92	1.4	1.38	0.00080
	CH19	2440	4.781	3.01	1.4	1.38	0.00083
	CH39	2480	4.278	2.68	1.4	1.38	0.00074

Based on safety distance (r) **20cm**, the antenna gain (G) is **1.38 Numerical**, and the highest power output (P) is **5.70mW**, the power density (S) is **0.00157mW/cm²**.