

FCC ID: XKB-EFT930G

Device is a handheld only payment terminal that has a 13.56MHz tag reader. It also includes a previously certified GPRS module with **FCC ID: VW3HILOC**.

The payment terminal is in mobile exposure category (d>20cm away from body, excluding hands and wrist, when held in the hand).

Based on the original RF exposure exhibit of FCC ID: VW3HILOC the highest power density levels at 20cm are as follows

GSM 850 → 0.057mW/cm² Limit = 0.55mW/cm²

PCS 1900 → 0.019mW/cm² Limit = 1.0mW/cm²

For 13.56MHz RFID tag reader

Highest fundamental field strength level = 79.6dBuV/m at 3m

EIRP = 0.027mW

Power density at 20cm = 0.000005mW/cm²

Limit = $180/f^2 = 180/((13.56)^2) = 0.9789 \text{ mW/cm}^2$

f is frequency in MHz

(Reference 47CFR 1.1310 general population limit)

13.56MHz tag reader antenna and the GPRS module antenna are located closer than 20cm from each other within the handheld terminal and they can transmit at the same time.

If $\sum [Pd(n) / L(n)] < 1$, then device complies with the RF radiation exposure limits for a mobile device (d>20cm from body), where;

Pd(n) is the power density at 20cm

L(n) is the applicable MPE limit

For GSM 850 + RFID configuration

$(0.057/0.55) + (0.000005/0.9789) = 0.104 < 1$

For GSM 1900 + RFID configuration

$(0.019/1) + (0.000005/0.9789) = 0.019 < 1$

Therefore the handheld terminal complies with FCC RF radiation exposure limits for general population as a mobile device (d>20cm from body).