

Federal Communication Commission
Authorization and Evaluation Division
7435 Oakland Mills Road
Columbia, MD 21046

Attention: Reviewing Engineer

The **Prophet 4000** device is a Wireless Remote Tank Monitor with a built in GSM card – Q24 EXT from Wavecom.

Due to the construction and the position of the antenna, the distance under normal operating conditions of more than 20 cm is guaranteed.

The maximum output EIRP power for 850 MHz band: 601.11 mW (27.79 dBm) @ 824.6 MHz.
The maximum output EIRP power for 1900 MHz band: 1 629 mW (32.12 dBm) @ 1850.2 MHz.

Regarding MPE limits, GPUC environment limits maximum exposure to 1 mW/cm².

The power density is:

$$S = E^2/3770 = 13 H^2 = \text{limit} < 1 \text{ mW/cm}^2$$

Where: S = Power density (mW/cm²)
E = electrical field strength (V/m)

This formula converted using the EIRP is

$$P_{\text{out}} * G / 4\pi * r^2 \text{ mW/cm}^2$$
$$601.11 / 4\pi * 400 = 0.120 \text{ mW/cm}^2$$
$$1\ 629 / 4\pi * 400 = 0.324 \text{ mW/cm}^2$$

Calculations are based on standard formula for calculating field strength at a distance and converting power density using free space impedance.

If you should have any questions regarding this submission, please feel free to contact the undersigned.

Yours truly,

Val Tankov
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