

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

Attention: Reviewing Engineer

The **Teletrac Prism TM2** is a GSM / GPRS Vehicle Tracking Unit.

Due to the construction and the position of the antenna a distance under normal operating conditions of more than 20 cm is guaranteed. Additionally the user manual states:

This information includes the following: *A minimum separation distance of 20 cm must be maintained between the antenna and the person for this device to satisfy the RF exposure requirements of the FCC.*

The maximum output power of the Burst 1928 mW (32.85 dBm).

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

The power density is:

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

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

This formula converted using the EIRP is

$$P_{\text{out}} * G / 4\pi * r^2 \text{ mW/cm}^2$$
$$1928 / 4\pi * 400 = 0.38 \text{ mW/cm}^2$$

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,

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