

Subject: SAR Testing of Body Worn GSM Device

---Reply from Customer on 03/13/2009---

To answer your questions:

- internal photos show two antennas - please explain transmission characteristics for each antenna

The device contains a GPS receiver. The helical antenna is for GPS (Sarantel GeoHelix-S) and the PCB antenna is for 850/ 1900 GSM operation.

- please explain whether device operates at 100 % eg for SAR testing purposes

The device is not capable of 100% operation in normal use. It was set up for 100% transmission for SAR test purposes.

- what is mean power for all transmit modes and freqs. at highest duty factor device is capable of supporting?

The Transmitter Source Based Time Averaging Duty Cycle has been calculated to be 0.000077. Transmitter mean power can therefore be calculated as $7.7 \times 10^{-5} \times$ measured power ($0.54W \times 7.7 \times 10^{-5} = 0.04mW$ GSM850 and $1.65W \times 7.7 \times 10^{-5} = 0.13mW$ PCS1900).

- please explain system characteristics that establish device transmission characteristics, eg after power-on device bursts every two minutes until battery runs out or powered-off etc., and/or ...

The unit is a belt worn tracking device and is configured to send an information packet of data containing information relating to the users location. The device is configured to transmit a data burst packet up to a maximum of once every 2 minutes. Each data packet transmitted uses up to a maximum of 2GSM time slots. This maximum time is factory preset and cannot be changed by the user.

Response:

based on description, details and explanations can be submitted within eqpt. auth. application to support SAR compliance; Form-731 should also reference/cite this pre-filing KDB