

In § 2.1091(b), a mobile device is defined as a transmitting device designed to be used in other than fixed locations and to generally be used in such a way that a separation distance of at least 20 centimeters is normally maintained between the transmitter's antenna and the body of the user or nearby persons. In accordance with § 2.1091(c), mobile Cellular devices are categorically excluded from routine environmental evaluation for RF exposure prior to equipment authorization or use if their ERP is less than 1.5 W (31.7 dBm).

The CRM4200 technical specification mandates a separation distance of at least 20 cm between the unit's antenna and the body of the user and nearby persons for ALL uses and applications.

The CRM4200 is not designed for or intended to be used in portable applications, as defined in § 2.1093 (within 20 cm of the body of the user), and the technical specifications and OEM instructions contains specific language prohibiting such uses.

Finally, to provide proof that the CRM 4200 is categorically excluded from a routine environmental evaluation for RF exposure, an MPE calculation is provided and has been uploaded, which is label “**revised MPE calculation**”. The customer will be providing a Centurion (M/N: EXE-821-SM), which has a gain of 2.5 dBi. This will be the only antenna provided by the customer. The maximum power that they want authorization is 600 mW. Using the provided information the following EIRP or ERP can be calculated.

600 mW (27.78 dBm)

$EIRP = 27.78 \text{ dBm} + 2.5 \text{ dBi} = 30.28 \text{ dBm}$

$ERP = 30.28 \text{ dBm} - 2.14 \text{ dB} = 28.14 \text{ dBm}$ or .651 Watts

Using the provided antenna gain, the total power, in ERP, comes out to be .651 Watts. This is below the 1.5 Watts (ERP), which excludes the CRM4200 from routine environmental evaluation for RF exposure.