

FCC ID: YJC-RDMERTO

Model: RDM

There are 3 radios on board. They only transmit **one at a time**. So there is no simultaneous transmission.

Novatel HS 3001 cell modem (FCC ID MIVCNN0301) and Synapse SM200 RF engine (FCC ID U9O-SM200) have their RF exposure compliance addressed in their corresponding filings with the FCC.

This document addresses RF exposure compliance for the ERT radio (910.0-919.8MHz) in this application.

Host product Itron C2SXD Form 2S Electric Meter is installed more than 20cm away from nearby people and ERT radio antenna is a folded quarter-wave monopole printed circuit trace antenna internal to the host.

Maximum peak output power at the antenna terminal and declared antenna gain are listed on Pg 16 of the test report and are used in the following equation.

Power density at 20cm is based on

$$S = \frac{PG}{4\pi R^2}$$

Where:

S = power density

P = power input to the antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna

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|--|---------------------------------------|
| Maximum peak output power at the antenna terminal: | 8.93 (dBm) |
| Maximum peak output power at the antenna terminal: | 7.816278046 (mW) |
| Antenna gain(typical): | 5 (dBi) |
| Maximum antenna gain: | 3.16227766 (numeric) |
| Prediction distance: | 20 (cm) |
| Prediction frequency: | 915 (MHz) |
| MPE limit for uncontrolled exposure at prediction frequency: | 0.61 (mW/cm ²) |
| Power density at prediction frequency: | 0.004917 (mW/cm ²) |
| Therefore device complies with FCC RF radiation exposure limits for general population in mobile exposure category (distance > 20cm) | |