

Notes to Installers/ Technicians

The TR412 is a self contained single carrier transceiver card that slide into our BS 411 and BS 414 rack systems. The TR412 card is FCC approved for use and only fit in Damm Cellular equipment. The TR412 will only fit these rack systems. The base station supplies both the power supply voltages and the programming/network connectivity required to make the base stations function.

Complete operational documentation is included in the Damm Cellular TETRA User's Manual Version 7.5.

RF Exposure

The TR412 when installed in the base stations are designed for use with antennas that are fixed mounted on permanent structures. The antenna system used can have many different configurations and gains. The separation distance between and other operational requirements concerning RF exposure are contained in the RF exposure report. A summary for one case is shown below:

Frequency: 450 MHz

The conducted power output is 12 Watts. Power out of base station (max.)

The coax loss was taken as 1.0 dB.

Antenna gain was taken as 3 dBi

100% Duty Factor

Power Density = $S = 0.3 \text{ mW/cm}^2$

For a transmitter operating with the above criteria the separation distance should be no less than 103 cm or 3.4 ft between the antenna, including any radiating structure, and any persons when normally operated. This is for only a single transmitting carrier; other operating conditions should follow a procedure like that shown in the RF exposure report and following the guidelines such as those in FCC document OET-65.