

TV Power Density Calculator

This calculator computes the radio-frequency power density from a TV broadcast station at a specified distance from the antenna. The result is expressed in absolute units and as a percentage of the power density limits for human exposure defined in the NCRP-86 guidelines adopted by the FCC.

Select either analog or digital transmission, and fill in all other fields. Press the compute button to compute the power density.

Note: The aural ERP field is not used for digital transmission and may be left blank in that case.

Transmission	<input type="radio"/> Analog (NTSC) <input checked="" type="radio"/> Digital (DTV)
Channel	<input type="text" value="15"/>
Peak ERP	<input type="text" value="20.0"/> kilowatts
Aural ERP	<input type="text"/> %
Relative Field	<input type="text" value="20.0"/> %
Distance	<input type="text" value="13.0"/> meters
Power Density vs. Public Limit vs. Occupational Limit	0.158 mW/cm ² 49.5 % 9.91 %

Compute

