



Wireless Bypass

wireless solutions for CMTS and CATV distribution

Statement of Radiofrequency Radiation Exposure Limits

47 CFR Sec. 1.1310 defines the limits for uncontrolled and controlled exposure. For transmitters operating in the 5725 – 5825 MHz frequency band the exposure limits for uncontrolled and controlled exposures are 5 mW/cm² and 1 mW/cm² respectively.

Wireless Bypass offers two configurations of UNII band radio systems, point-to-multipoint (P/MP) and point-to-point (P/P). Each configuration of radio system contains a 'downstream unit' designated with an 'H' e.g. DL5800H, and an 'upstream unit' designated with a 'C'. The 'downstream unit', DL5800H, has a 26 dB transmitter bandwidth of approximately 6 MHz and the 'upstream unit', DL5800C, has a 26 dB transmitter bandwidth of approximately 3.2 MHz.

The following table gives the distance from the antenna that the power density is 1 mW/cm² and the power density at a distance of 1.5 meters from the antenna. 1.5 meters is required in the Users Manual for uncontrolled distance.

Radio System	Maximum Peak EIRP (dBm)	Distance for 1 mW/cm ² (cm)	Power Density at 1.5 meter (mw/cm ²)
DL5800H P/MP	31.78	9.76	0.0042
DL5800H P/P	48.78	69.09	0.2121
DL5800C P/MP	28.05	7.13	0.0023
DL5800C P/P	45.05	50.45	0.1131

The following is the relevant text from the DL5800 Technical Manual

RF Exposure Limits

The DL5800 series transceivers and associated antenna shall be installed by qualified personal. Section 1.1310 of the Federal Communication Commission Regulations sets limits on the field strengths and power densities allowable for human exposure. To comply with Radiofrequency exposure requirements, the antennas used for the DL5800 series shall be installed to provide a minimum distance of 1.5 meters where persons may have access.

Antenna Warning

A label or sign containing the following language shall be placed on or near the antenna and visible from at least 1.5 meters:

CAUTION: To comply with RF exposure requirements, this antenna must be installed to provide a separation distance of at least 1.5 meters from all persons.