

MPE Calculation / RF Exposure Info

RF power amplifier
Model No.:LPA1900-120-SC01
FCC ID: WBKLPA1900
Trade Name: BTI

The device is a Power Amplifier as a part of Multi-Carrier High Power Outdoor Booster platform to provide higher downlink EIRP to extend the coverage of existing cellular networks.

This specific device will be professionally installed.

Hereby the the antenna gain and cable attenuation will be defined site specific at the time of licensing with the appropriate FCC Bureau(s)

The maximum permissible exposure limit is defined in **47 CFR 1.1310** with **1.0 mW/cm² (general / uncontrolled exposures)** for devices operating in the frequency range of **1500 – 100,000 MHz**.

The max measured conducted output power is **117.5 W (50.7 dBm)**.

The maximum permitted level is to be calculated using the general equation:

$$S = P * G / 4\pi R^2$$

P = 117500 mW; G = *to be defined* (numeric gain); $\pi = 3,1416$

The min separation distance between the antenna and any human body is to be calculated (solving for R in cm) with the final actual antenna gain/cable attenuation where the limit of **1.0 mW/cm²** is kept.

The antenna used with this device must be fixed-mounted on outdoor permanent structures with a sufficient distance to any human body to comply with the RF Exposure limit.