

RF Exposure calculation for the frequency paths

ION-M7P/85P/19P is a multi-band, multi-operator remote unit configuration used in conjunction with a master unit in the ION optical distribution system.

This system transports up to four frequency bands simultaneously (700 MHz, 850 MHz, 1900 MHz), providing a cost-effective solution for distributing capacity from one or more base stations.

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

$$R = \sqrt{P \cdot G / 4\pi S}$$

Path	700 MHz	850 MHz	1900 MHz
Frequency range	728 – 757 MHz	869 MHz – 894 MHz	1930 MHz – 1995 MHz
Max Power Output	43,31 dBm = 21,43 W	43,52 dBm = 22,49 W	43,34 dBm = 21,56 W
Antenna gain	17 dBi	17 dBi	17 dBi
Min cabel loss	0,5 dB	0,5 dB	0,5 dB
Power Density Limit	4,85 W/m ²	5,79 W/m ²	10 W/m ²
Distance	3,97 m	3,71 m	2,76 m



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