

Safe distances for General Public Use

$$R = \sqrt{\frac{PG}{4\pi(f/150W/m^2)}}$$

Due to numerous different applications, it is reasonable that users are not always aware of parameters of all components in a SATEL-TA11 radio modem system. However, obeying the safe distances in the table below, every user can easily fulfil the Canadian authority limit (depends on the frequency in use) for human exposure to radio frequency radiation in general public use.

Radio Modem Model		Minimum safe distance to the antenna For General Public use
SATEL-TA11	⇒	87 cm

Safe distances for Controlled Use

Calculated by formula below:

$$R = \sqrt{\frac{PG}{4\pi(f/30W/m^2)}}$$

Minimum distance however being always at least 20 cm.

Advanced users and system designers who are fully aware of key parameters of SATEL-TA11 radio modem system are allowed to follow the safe distances for controlled use listed in the table below.

Tx output power [W]	Antenna system gain [dBi / numeric]	Tx duty cycle [%], 6 min. average	Frequency [MHz]	Minimum safe distance [cm]
1.0	14 / 25.12	100	403/470	38.6/35.7
		50	403/470	27.3/25.3
		20	403/470	20
		10	403/470	20
	8 / 6.310	100	403/470	20
		50	403/470	20
		20	403/470	20
		10	403/470	20
	6 / 3.981	100	403/470	20
		50	403/470	20
		20	403/470	20
		10	403/470	20
	2 / 1.585	100	403/470	20
		50	403/470	20
		20	403/470	20
		10	403/470	20
0.5	6 / 3.981	100	403/470	20
		50	403/470	20
		20	403/470	20
		10	403/470	20

	0 / 1.000	10	403/470	20
		100	403/470	20
		50	403/470	20
		20	403/470	20
		10	403/470	20
0.2	6 / 3.981	100	403/470	20
		50	403/470	20
		20	403/470	20
		10	403/470	20
	0 / 1.000	100	403/470	20
		50	403/470	20
		20	403/470	20
		10	403/470	20
0.1	0 / 1.000	100	403/470	20
		50	403/470	20
		20	403/470	20
		10	403/470	20

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