

Calculation: RF-Exposure for 903 ~ 927.5 MHz Transmitter

FCC ID: **XUS-TVPAP1**

Type of Device: **TrackView Pro Access Point**

In accordance with **CFR47, §1.1310 Radiofrequency radiation exposure limits and**

- 447498 D01 General RF Exposure Guidance v06
- 447498 D04 Interim General RF Exposure Guidance v01

S: Limit for power density according to Table 1 to § 1.1310(e)(1)

- (i) Occupational / Controlled Exposure
- (ii) General Population / Uncontrolled Exposure
(calculated for lowest frequency 903 MHz with formula:
f/1500 ~ **0,602 mW/cm²**)

P: **11,2 mW** (max conducted output power leading to highest radiated power)

G: **0.068** (numeric gain based on measured antenna gain -13.8 dBd)

D: Duty cycle: **1** (100%)

R: Distance in what the limit of S must be reached: **20 cm**
(refer also to the manufacturers installation / user manual)

$$S = \frac{P \cdot G \cdot D}{4 \cdot \pi \cdot R^2} \Rightarrow \underline{S} = \frac{11,2 \text{ mW} \cdot 0.068 \cdot 1}{4 \cdot \pi \cdot (20 \text{ cm})^2} = \underline{\underline{0,00015 \frac{\text{mW}}{\text{cm}^2}}}$$

Conclusion: The value of the calculated power density at the recommended minimum separation distance of 20cm is well below the applicable limit.