

Sensia 200D Connect RF Exposure:-

The Sensia 200D Connect is intended as a mobile device. A warning statement is included in the user manual advising users to maintain a minimum distance of 20cm.

Evaluation is therefore for exposure potential against the MPE limits given in Appendix A of OET Bulletin 65, Supplement C: 1500-100,000MHz; 1mW/cm²

Compliance requirements are based upon General population / Uncontrolled exposure.

Equation (3) of OET Bulletin 65:

$$S = \frac{PG}{4\pi R^2}$$

where: S = power density (in appropriate units, e.g. mW/cm²)
P = power input to the antenna (in appropriate units, e.g. mW)
G = power gain of the antenna in the direction of interest relative to an isotropic radiator
R = distance to the centre of radiation of the antenna (appropriate units, e.g. cm)

Substituting known values for the Sensia 200D Connect:

WiFi RF worst case average power, P = 29.5mW.

WiFi antenna gain (measured), G = -0.8dB.

n.b. this is the best gain (low channel gain) measured in practice on the EUT.

Distance, R = 20cm (for mobile use).

$$S = 0.0049 \quad < 1\text{mW/cm}^2$$